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APPRAISAL MANUAL

1972 Edition

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MONTANA APPRAISAL MANUAL

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MONTANA APPRAISAL MANUAL

Purpose and Scope of Manual

The purposes of this Manual are as follows:

1. To present guidelines for uniform appraisal procedures in all counties.

2. To make available construction cost data that can be adapted to accomplish appraisals at true market value in all counties.

3. To present appraisal procedures, principles, and cost data in a form that will be usable by both experienced and inexperienced appraisers.

The content and scope of the material included in the manual has been determined by the following considerations:

1. The manual will provide the principles and cost information necessary to appraise the bulk of the property to be appraised.

2. The "replacement cost" approach to market value, for which the cost section of this manual is designed, is usually appropriate for the kinds of property covered in this manual.

3. The data needed to determine the replacement cost of each improvement can also be used to determine which properties are comparable, thus permitting the fullest possible additional use of the market data approach.

4. Because of the large number of residential properties, there are usually many valid sales. Therefore, residential property for which a sale price is not known can be compared with those for which the sale price is known. Replacement value as estimated by this manual can thus be checked against market value on enough residences to establish the true relationship.

5. Commercial and industrial properties not included in this manual often pose the following appraisal problems:

   (a) Lack of standardized construction features complicates the use of the cost approach.

(b) Lack of comparability on a cost basis one with another.

(c) Few comparable structures.

(d) Few comparable sales.

(e) The market value of these properties arises primarily from their ability to earn income. Since the other approaches to value are frequently not conclusive, the income approach becomes a valuable tool. The use of the income approach is beyond the scope of this manual.[1] The inexperienced appraiser should seek assistance in the appraisal of complex commercial and industrial properties.

As the need arises, and as our facilities permit, cost schedules included in this manual will be brought up to date, and additional schedules will be prepared covering other kinds of buildings and improvements.

Market Value Defined

Three widely accepted definitions of "market value" are as follows:

1. The highest price in terms of money which a property will bring if exposed for sale in the open market, allowing a reasonable time to find a purchaser who buys with knowledge of all the uses to which it is adapted and for which it is capable of being used.

2. The price at which a willing seller would sell and a willing buyer would buy, neither being under abnormal pressure.

3. The price expectable if a reasonable time is allowed to find a purchaser and if both seller and prospective buyer are fully informed.[2]

"Current" Defined

The need for a continuous effort to keep appraisals current results from any of the following conditions:

---

[1] For a full discussion of the income approach to value see The Appraisal of Real Estate, American Institute of Real Estate Appraisers, 36 South Wabash Avenue, Chicago, Illinois, 1964. Many other texts on the subject are also available.

[2] American Institute of Real Estate Appraisers, Appraisal Terminology and Handbook, 1967, p. 131.

1. The former appraisal on some properties may have been incorrect.

2. The construction of new buildings, major additions or remodeling.

3. Changes in the real estate market for some or all types of property.

4. Significant changes in value that occur because of physical deterioration, obsolescence or for economic reasons.

Keeping appraisals current means changing values whenever definite value changes actually occur. It is recommended that part of the appraisals in each county be reviewed, and if necessary, reappraised each year so that all locally appraised properties are adjusted to current values at least once in each five year period. This requires constant work in most counties.

Three Approaches to Value

Appraisers use three separate approaches to value, either singly or in combination. If used in combination, the values derived by the different approaches are not averaged. Rather the appraiser uses the results to aid his judgment in arriving at an estimate of value. A list and brief description of the three approaches to value follows:

1. Cost approach. The use of the cost approach involves determining the present new cost of reproducing the subject building with an identical structure or replacing it with a less costly but equally functional structure of more modern design. To arrive at present market value the reproduction or replacement cost must be reduced by the amount that physical depreciation and functional obsolescence, of the building itself or because of location of the building, has reduced the market value of the building below the present reproduction or replacement cost.

Since much judgment is required in determining realistic physical and functional depreciation in older buildings, the cost approach is relatively more satisfactory when applied to newer structures. With older residences it is especially necessary to check depreciated reproduction values with market data on comparable buildings.

The cost approach determines the upper limit of market value of improvements

since it may be assumed that a buyer will build rather than pay more than the reproduction or replacement cost of an existing building.

2. Market approach. The market approach consists of determining the selling price of properties on which recent sales have occurred, determining whether the selling price meets the definition of market value as outlined heretofore, and relating the known sales prices to comparable property. This is the principal approach to the value of unimproved residential land. It is a well adapted approach to the value of residential improvements in conjunction with the cost approach, since the comparability of different dwellings can be determined by the same data that goes into the determination of reproduction or replacement cost. The market approach check on reproduction value is especially necessary on older residences since it is a way of determining the effect of physical and functional depreciation on market value.

3. Income approach. The income approach is especially applicable to income-producing property. Since such property is presumably purchased because of its income earning ability, its market value can be assumed to be the present value of future net income. The use of this method to determine the market value of land and improvements requires a prediction of the following facts:

(a) The annual fair net rental value of the property to be appraised. The net income to consider is not that from any one tenant but rather the fair annual rental value of the subject property as determined by competitive rental conditions, or economic rent. Or net income can be determined by subtracting expenses from gross income.

(b) The duration of the net income stream.

(c) The rate of recovery of capital necessary to attract investors in similar property.

(d) The interest rate necessary to attract investment in similar property.

(e) Thus it may be seen that much of the information necessary for proper use of the income approach must come from market data.

The income approach is least complex when it is applied to income-producing

land where the income is usually assumed to be perpetual. In this case, it is only necessary to divide the appropriate interest rate into the estimated future net income to find the present reasonable investment value. When a refined approach to the present value of a terminable future income is required, the process is more complex.

The foregoing discussion of the income approach is presented primarily to define this approach and point out some complexities encountered in its use.

Procedure for Gathering Market (Sales) Data

A determined effort should be made by every appraiser to gather, screen and store for present or future use, sales as they occur in various areas of his county. These sales should be segregated by single family residential, multi-family, commercial and vacant lots and tracts. The collection of this data becomes necessary for the following reasons:

1. As indicated under the section entitled "Local Indexes", sales are necessary for the determination of correct local indexes.

2. The true market value of residential, commercial and industrial land can only be determined from actual screened sale prices of such property or comparable property.

3. Sales data on improved property usually lump both land and improvements together. The separate value of land and improvements on each property is needed in order to make fullest use of the sales-appraisal comparisons. Recent sales of comparable vacant lots with equally available utilities are very significant since they are helpful in separating land from improvement values.

4. Sale prices of older residences indicate to what extent physical depreciation and functional obsolescence have affected the market price or to what extent inflation has increased real estate values in any age category.

In selecting sales for sales-appraisal comparisons, care must be taken to use only sales that reflect true market value. To meet the definition of true market value, a sale must be at the highest price which a property will bring if

fully exposed for sale in the open market, and is purchased by an informed buyer. The sale must reflect the full price paid for the subject real estate, but the price should not include a consideration for personal property that may have been included. The payment conditions, unless they depart greatly from the normal, should not have a noticeable effect on the sale, and there must have been full exposure on the open market. Circumstances surrounding a sale should be examined to evaluate whether the consideration represented market value. If the transaction was a tax sale, sale between relatives, sale to a government agency, sale to a church, sale to a charitable organization, an inter-company sale, a judicial sale, etc., the sale might not meet the definition of an arms length transaction. It is recommended such sales, if used at all, be very carefully checked for undue influence.

Source of Building Cost Used in This Manual

In preparing this manual the staff of the State Department of Revenue has studied the manuals used by all of the commercial appraisal firms that have done tax appraisal work in Montana in conjunction with and prior to the 1957 Classification Act, as well as manuals prepared by or for several of the other states. The residential cost section of this manual has been partially patterned after the Building Appraisal Manual prepared by the State of Washington. Building costs presented in this manual are based on those prevailing in Helena, Montana during the year 1971. Values computed by use of the cost schedules in this manual have been checked against actual selling prices in Helena.

Local Indexes

Surveys of building costs and residential sales covering all Montana county seats indicate that both costs and sales in Helena, Montana are as high as in any place in the State. In using this manual to arrive at the market value of Helena residences by the cost approach, 100 percent of the costs, less accrued depreciation, would be market value. Thus, Helena would be said to have an index of 100.

The actual index of any other city or town in Montana is determined by local selling prices of residences and residential lands, and reflects local costs only insofar as the costs determine selling prices. Thus, in establishing a local index that will adjust this manual to reflect accurate market value in a particular community, it is necessary to find the sale prices of enough houses of representative type within the community to establish the percentage relationship between the cost of building various types of residences, as indicated by this manual, and the actual selling prices of the same or comparable residences in the selected area. This relationship will indicate the correct local index. For example, if an average of representative residences are found to sell for 10 percent less than the cost determined by use of this manual, a local index of 90 percent would be appropriate.

Correct indexes frequently vary within counties. Usually, but not always, the county seat has the highest index, with smaller towns and rural residences being lower. Because residences on farms are usually only sold with the farm, and because they are less accessible to public services, such as schools, shopping facilities, fire and police protection, water and sewer, etc., the use of an index of 80 percent of the county seat index has been specified for farm residences. This 20 percent reduction does not apply to other farm buildings which are priced from separate schedules. For some of these same reasons, plus fewer job opportunities with resultant decreased buyer or rental demand, small towns frequently will have an index that reflects values lower than in larger towns.

It may be seen from the method of determining the local index from actual residential sales that average levels of value for the community will be reflected by the index. In communities where insufficient sales occur to establish an indication of market values, comparison to other communities with similar economic characteristics will serve to determine the proper local index.

Because of the complexity of establishing county indexes properly reflecting market value in each county, and because it is the responsibility of the State Board of Equalization to maintain equality in assessments among counties, the State

Board of Equalization should be called upon to help establish and approve county indexes.

The Use of Maps

It is recommended that the appraiser record all pertinent sales on a plat map of the area to be appraised. Appraised values should also be entered on a map. Such a procedure will help in extending sales information to comparable properties and in explaining the method used in arriving at values to interested taxpayers.

The Basis of Residential Land Value

The true market value of residential land can only be determined by the actual sale price of such property or comparable property.

The market value of land is determined by the use for which it has the greatest value. Common competing uses are agricultural, residential, commercial, industrial, and recreational.

The State Board of Equalization has set up the following guidelines to help Montana appraisers determine the proper basis of value:

1. The number of acres involved in a single tract is not the deciding factor in determining whether it is classified and graded as agricultural land or appraised as industrial, commerical or residential land.

2. Actual use of land for purposes other than raising crops or grass automatically indicates an appraisal based on the actual use.

3. If land is to be appraised for industrial, commerical or homesite purposes, rather than classified and graded as farm or grazing land, the taxing authority must have definite proof through actual sales, options, or offers to purchase, etc., that there is a present demand for the land under consideration for a use that would justify a higher value than can be economically justified in agricultural use.

4. For purposes of valuation, in some circumstances, an existing tract may be broken down and the value of different parts of the tract be based on different

uses or have a different value for the same type of use.

5. The appraisal of industrial, commerical and residential tracts should be: (a) based on current sales and (b) should be in line with other comparable property.

The Present Value of a Future Selling Price

The valuation of lands being developed for residential building presents a problem in that frequently the entire development cannot be sold for an established price within a reasonably short period of time. If only part of the land can be sold at prevailing prices in the immediate future, the appraiser can determine the present value of the balance of the land by estimating the present value of future sales. This can be done by referring to tables to be found in most appraisal books which give the present value of one dollar from one to fifty years in the future at different interest rates. The following brief example shows the present value of a property that can be sold at indicated dates in the future for $1,000, assuming that competitive uses for money give a five percent return and that property taxes are two percent of the $1,000.

Waiting Period Before Sale in Years	Present Value of Property
5	$ 713
10	508
15	362
20	258
25	184
30	131

The use of this procedure necessitates frequent reviews as sales in the area may unexpectedly accelerate or decline.

The Unit of Value for Residential Land

The appraised value of city and town lots of uniform depth is usually estimated on a front foot basis. Suburban lands fronting on a road or lakeshore are also sometimes valued on a front foot basis with depth tables being used to correct

for variation in depth. Acreage beyond the limit of the front foot valued land is frequently valued on a per acre basis. A square foot unit of value may be most appropriate for lots and tracts that are very irregular in shape.

Excess Acreage in Residential Tracts

If the market value of one acre for residential purposes is $1,000, the market value of the excess nine acres in a ten acre tract will usually be less than $1,000 per acre if the entire ten acres supports only the one residence. While the additional acres have value to a residential tract, each additional acre above a minimum usually has a declining value. The examination of actual sales in the area of the subject property is the only reliable way to determine the market value of the excess acres.

The market value of the excess acres will be determined by the highest value use to which it is adapted, the desirability of the land within the adapted use, and the demand for land for that use. If there are no other desirable homesites on the property the value of the excess acres may be chiefly influenced by their agricultural or recreational value. If there are other desirable homesites on the property the value of the excess acres may be influenced by view, water frontage, trees, accessibility to roads, utilities and other public services, etc. There are so many variables affecting both homesite and excess acreage values that each subject property is an individual problem. It is not uncommon for the per acre value of acreage in excess of the minimum requirements for a homesite to be less than half of the per acre value of the minimum homesite.

DIRECTIONS FOR RECORDING DATA ON APPRAISAL FORM OR CARD

Three different appraisal cards have been designed by the State Board of Equalization for the recording of appraisal data and the computation of estimates of value.

The types of cards are as follows:

(1) Urban Residential Property. Use a "Residential Improvement and Lot Appraisal Form."

(2) Commerical and Industrial Property. Use a "Commercial and Industrial Improvement and Land Form."

(3) Farm Buildings and Residences. Use a "Farm Improvement Appraisal Form."

The reason for using three different colored cards for the various types of property is to make them more readily recognizable in the filing system. The instructions on the pages to follow are primarily directed toward helping the appraiser in listing, sketching and grading of the property to be appraised.

An illustration of an urban "Residential Improvement and Lot Appraisal Form" with proper appraisal data entries is shown on a following page.

Directions for Recording Appraisal Data

1. Be sure to put subject property on proper card.

2. Fill out a card for each dwelling to be appraised.

3. Draw as neat a sketch as possible, use a ruler to insure straight lines. Keep sketch to proper scale. Generally a space between dots equals two feet.

4. Make sure to designate story heights and such additions as porches, attached garage, carports and patios.

5. When measuring irregular shaped buildings, be sure and measure all sides, then add up measurements and see if opposite sides check.

6. Make sure all measurements are placed in their proper location. Where possible, measurements should be shown on the inside of the sketch. Figures outside of the sketch indicate distance from one corner to another.

7. Correct measurements are a must. Any error in the measuring can mean an unfair assessment.

8. Should property owner or occupant decline to allow measuring and inspection of property, do not argue, leave property and report incident to supervisor or superiors.

9. The listing of data pertinent to the computation of value of the subject property is very important. Thorough inspection of all component parts of the subject property will eliminate overlooking any deterioration or feature that would add or detract from market value.

RESIDENTIAL IMPROVEMENTS AND LOT APPRAISAL FORM

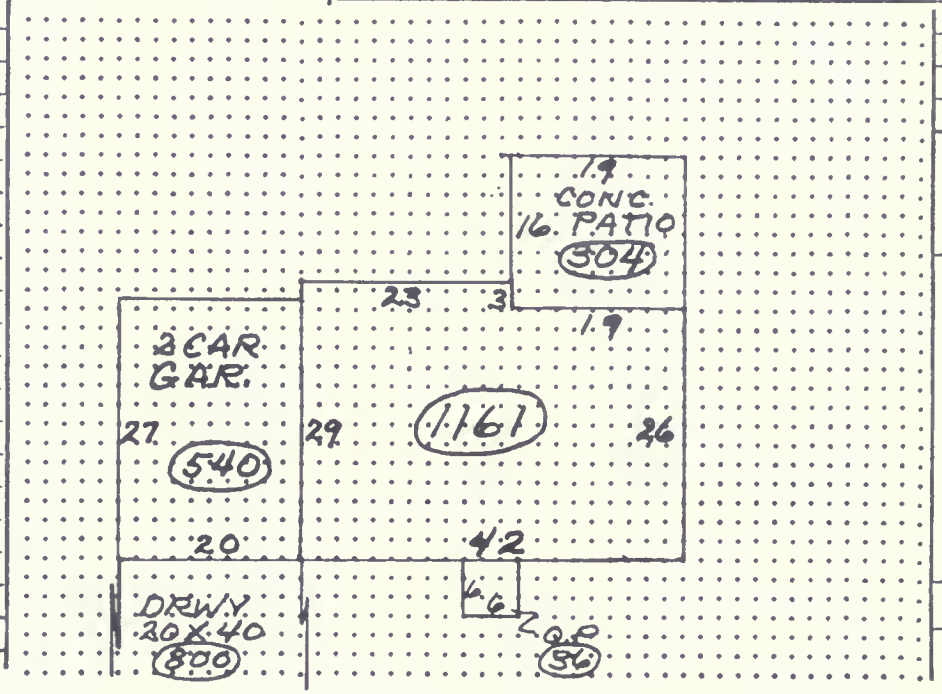
OCCUPANCY	CONSTRUCTION	SIZE	(GRADE) TYPE	AGE	REMOD-ELED	CONDI-TION	REPLACE. VALUE	PHY. DEP.	PHYSICAL VALUE	FUNC. DEP.	NORMAL VALUE	LOCAL INDEX	SOUND VALUE
DWLG SINGLE	IS/B NA FR	1161	IF-5	1960	—	GOOD	28,182	16	23673	—	—	—	23675
1													
2													

IMPROVEMENTS								
SIDE-WALKS	CURB-ING	ST. PAVED	ST. OILED	ST. DIRT	SEWER	WATER	GAS	ELEC-TRICITY
✓	✓	✓			✓	✓	✓	✓

LAND COMPUTATION									TOTAL
FRONTAGE FIGURED	AVERAGE DEPTH	UNIT PRICE	UNIT %	FRONT FT. PRICE	CORNER INFL.	TOTAL	% DEPR.	VALUE
75	140	40	100	40	—	3000		3000

NO SQ. FT.	PER SQ. FT.	
1161	13.90	16138
CONC. PATIO 304	.55	167
O.P. 36	2.95	106
ATT. GAR. 540	3.85	2079
DRWY 800	.55	440

BASE PRICE			
ADD OR SUBTRACT	PER SQ. FT.		FLAT
BASEMENT AREA 1161	2.85	+	3309
ATTIC	NONE		—
INSULATION	BASE		—
HEATING 1161	1.20	+	1393
PLUMBING	FLAT	+	510
FIREPLACES	FLAT	+	1450
TILING	BASE		—
BLT. IN	FLAT	+	350
BSMT FIN 800	2.80	+	2240
QUALITY FACTOR			
TOTAL BASE PRICE			
REPLACEMENT VALUE			28,182



TOTAL SOUND VAL. IMPS.	28675
TOTAL SOUND VAL. LAND	3000
ASSESSED VALUE IMPS.	9470
ASSESSED VALUE LAND	1200

LOCATION OF IMPS. IN BLOCK

DWELLING: (1S) 1½S 2S

FOUNDATION	
PIERS, POSTS	
CONC. OR CINDER BLK.	
CONCRETE	✓
STONE	

WALL CONSTRUCTION	
FRAME	✓
CONCRETE BLOCK	
BRICK	

EXTERIOR FINISH	
STUCCO	
WOOD OR COMP. SHINGLE	
ASBESTOS SIDING	
BRICK VENEER	
SINGLE SIDING	
MASONITE	✓

ROOF TYPE	
HIP	
GABLE	✓
FLAT	

ROOFING MATERIAL	
~~WOOD~~ COMP. SHINGLE	✓
ASBESTOS SHINGLE	
SLATE	

BASEMENT AREA	UNFIN.	FIN.	UNFIN.	FIN.
	¼		½	
	¾		(FULL)	800

CEMENT FLOOR ✓

NO. — 3 ROOM ~~APTS~~.

ROOMS MAIN FLOOR

KIT. 1 L.R. 1 D.R. 1

B.R. 2 BATH 1 3/4

ATTIC NONE

UNFINISHED ¼

½ ¾ FULL

FLOORS & STAIRS

INSULATION	
WALLS	✓
ROOF	✓
FLOOR	

FLOORS	
CONCRETE	
PINE	
HARDWOOD	
PLYWOOD	✓
SINGLE FLOORING	
CARPET & TILE	

FL. JOISTS 2" x 10" x 16" O.C.

INTERIOR FINISH	1ST	2ND
PAINT OR PAPERED	✓	
DRY WALL	✓	
LATH & PLASTER		
WALL BOARD		
KNOTTY PINE		
H'DWOOD PANEL 1 WALL	✓	

TRIM	
PINE OR FIR	✓
HARDWOOD	

PLUMBING	
BATH TUBS	1
LAVATORIES	11
TOILETS	11
KITCHEN SINKS	1
HOT WATER HEATERS	1
SHOWER STALLS MTL.	1
SEPTIC TK. OR CESS PL.	
WATER ONLY	
DISHWASHER	
GARBAGE DISPOSAL	

LIGHTING	
SUITABLE FOR TYPE	✓

FIREPLACES	
FIREPLACE STACKS	1
FIREPLACES	11
ARTIFICIAL F'PLACES	
INCINERATOR	

HEATING	
OIL (GAS) STOKER	
GRAVITY HOT AIR	
FORCED HOT AIR	
STEAM	
HOT WATER ~~RADIATORS~~ BB	✓
RADIANT	
FLOOR OR WALL	
AIR CONDITIONING	
NO HEATING	

OUTBUILDINGS	1	2
WALL FOUNDATION		
PIER FOUNDATION		
CONCRETE FLOOR		
EARTH FLOOR NONE		
ROOFING		
SIDING		
INT. FINISH		
CEMENT BLOCK		
BRICK		
O.H. DOORS		
ELECTRIC LIGHTS		

TILING	SQ FT
PLASTIC OR METAL	BASE
CERAMIC	

WINDOWS	
REGULAR	
SUITABLE FOR TYPE	✓
THERMOPANE	X
	X

BUILT IN	
REFRIGERATORS	
FREEZER LOCKERS	
OVENS & RANGE - IF6	✓
STOVES	

DATE OF APPRAISAL 6-8-72

MEASURED BY J.B.D.

LISTED BY A.B.

PRICED BY I.C.L.

REVIEWED BY — DATE

POSTED BY — DATE

ADDRESS OF IMPS. 1234 HELEN AVE. HELENA, MONTANA

ADDITION MONTANA | BLOCK 3 | TRACT — | LOT 3 & W½ of 4

11

INSTRUCTIONS FOR LISTING COMPONENT PARTS OF A DWELLING ON THE APPRAISAL FORM OR CARD

FOUNDATION:

List the type of foundation, note the thickness as well as the quality. The quality of the foundation will have an influence upon the grade of house.

WALL CONSTRUCTION:

This pertains to the basic wall construction and will be noted as being either frame or masonry. If masonry veneer, list as frame, concrete block, or tile.

EXTERIOR:

List type of exterior cover, such as cedar siding, masonite, asbestos siding, face brick, common brick, etc.

ROOF TYPE:

List type, such as hip, gable, flat, etc.

ROOFING MATERIAL:

Be sure to list type of cover as this will have an important bearing on the value in some grades of houses.

BASEMENT AREA:

Determine the total area of the basement in square feet. This is important because the basement is computed by the actual square foot in this manual.

Determine the total square feet of finished basement and the number of rooms finished. Note the square feet of daylight windows. Note square foot areas of windows in excess of standard basement windows.

ROOMS - MAIN FLOOR:

List number of rooms on the first floor. Consider all of the first floor area, excluding porches, breezeways and attached garages, in the total number of square feet to be computed at the one story base price.

ATTIC:

The following guidelines are used to determine whether attic, 1½ story, or 2 story cost schedule, as presented in this manual, should be used.

In general, when the usable area on the second floor ranges from 35 percent to 75 percent of the ground floor area, it is classed as 1/2 story.

Dwellings whose usable area on the second floor exceeds 75 percent of the first floor area should be classed as 2-story structures.

Dwellings with usable floor area on the second floor of less than 35 percent of the first floor should be considered one story with a finished attic. The actual square feet of usable floor area should be determined. Dormer length should also be determined.

INSULATION:

Insulation is included in base cost in most grades; however, it should be noted in all grades.

FLOORS:

The type of floor in all dwellings should be noted. There are adjustments to be made for floor types in some grades of houses.

FLOOR JOISTS:

Dimensions and spacing of floor joists must be listed. Adequacy of floor joists will have an important influence on the quality grade.

INTERIOR FINISH & TRIM:

List the exact type of interior finish used on each floor. The quality of material and workmanship should also be noted.

PLUMBING:

All plumbing fixtures should be listed. Plumbing fixtures included in base cost are specified for each grade of residence. Add for all extra fixtures.

LIGHTING:

Normal wiring and electrical fixtures are specified and included in the base cost of each grade of residence. Electrical adjustments are not recommended unless it is observed that a house varies considerably from the normal established for each grade.

FIREPLACES:

All fireplaces should be listed and noted as to location and whether on the same stack or separate. Add for all fireplaces in all grades.

HEATING:

Add for all types of heat except free standing circulating heaters, stoves, etc. Give exact type of heating and source of heat.

OUTBUILDINGS:

This heading applies to outbuildings not connected to the dwelling. List as outlined on the card.

TILING:

Plastic tile and tile of similar quality are considered to be in the base cost in the average grade house. Ceramic tile should be noted where found. Where tile is not found in the average grade home simply note but do not deduct for this fact.

WINDOWS:

Note type of windows. Thermopane type windows should be noted but do not price. This feature, plus other extras, may have an influence on grade selected.

BUILT-INS:

List all built-in ovens, ranges, dishwashers, etc. Price from schedule found under this heading in each grade.

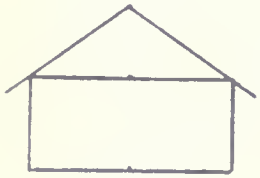
COMPLETION:

The occupancy, construction, size, type, age, condition, physical depreciation, and functional depreciation, if any, should be noted as indicated on the top of the card. Under "occupancy," designate if it is a single family or multiple family dwelling. Upon completion of listing and sketching of the subject property, the date of appraisal and the identity of the persons making the appraisal must be inserted in spaces provided at the lower right hand corner of the appraisal form. Unique features in construction or components, for which value has been added or subtracted, should be marked with an asterisk on the face of the card and thoroughly explained on the reverse side under "Remarks".

EXAMPLES OF ATTIC COMPUTATION

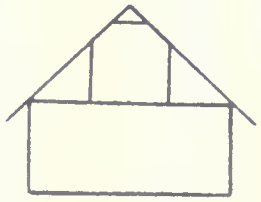
GRADE 1F-5

GROUND FLOOR AREA 1000 sq ft



1 STORY

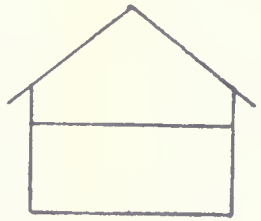
1000 sq ft x $14.50 = $14500



1 STORY WITH ATTIC

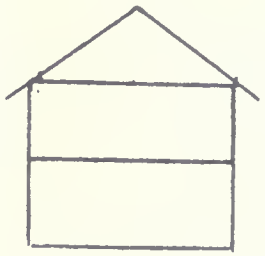
1000 sq ft x $14.50 = $14500
340 sq ft x $2.50 = 850
TOTAL $15,350

(SEE PAGES 15 & 16)



1½ STORY

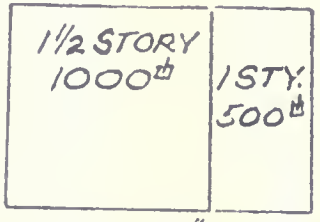
1000 sq ft x $14.50 = $14500
1000 sq ft x $4.80 = 4800
TOTAL $19,300

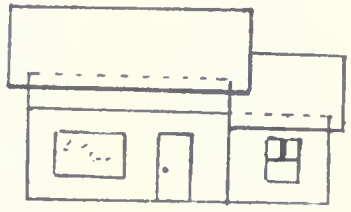


2 STORY

1000 sq ft x $14.50 = $14500
1000 sq ft x $6.95 = 6950
TOTAL $21450

GROUND FLOOR AREA 1500 sq ft
½ STORY AREA 1000 sq ft





1500 sq ft x $13.45 = $20175
1000 sq ft x $480 = 4800
TOTAL $24975

GRADING OF SINGLE FAMILY RESIDENCES

The accuracy of a residential appraisal depends largely upon the selection of the correct grade. Grade represents quality. Quality applies to both workmanship and type of materials used. The combination of quality workmanship and materials reflects increased cost and value. Proper grading is essential in selecting the correct pricing schedule to obtain realistic replacement cost. The cost of a dwelling constructed of high quality materials and with the best of workmanship throughout may be considerably more than that of one built from the same floor plan with inferior materials and workmanship.

The schedules in this manual have been developed to distinguish between variations in cost and represent the full range of conventional single family residential construction. The specifications as to type of facilities may not vary greatly between grades, however, the quality of materials, workmanship and design may be decidedly different.

The majority of dwellings fall within a definite grade of construction incorporating average quality of workmanship and materials. Consequently, better quality of construction, or construction of cheaper quality, can be determined by comparison with the average. A thorough inspection of both the inside and outside of a structure will reveal evidence of degrees of quality.

There are many chances for error in selecting the proper grade for a residence, such as grading the housewife's housekeeping ability, giving too much credit to the landscaping, being influenced by a new paint job, or the lack of maintenance. Always look for quality or the lack of it, and if the house happens to be in the older bracket try to picture the quality it represented when new and grade it as if it were new. Adjustments for condition will be made through application of depreciation.

This manual has eight basic grades of single family residences as follows:

1. 1F-1 Sub Standard, single family residence.
2. 1F-2 Poor Grade, single family residence.
3. 1F-3 Fair Grade, single family residence.
4. 1F-4 Slightly below average, single family residence.
5. 1F-5 Average, single family residence.
6. 1F-6 Good, single family residence.
7. 1F-7 Very good, single family residence.
8. 1F-8 Excellent, single family residence.

The basic grade, representing costs of construction with average quality of workmanship and materials involved, is designated as Grade 1F-5.

Grading would be a relatively simple process if all houses were built to conform to the base specifications outlined in this manual. Since this ideal condition does not exist, it becomes necessary to further refine the grading system. It is not unusual for conventional houses to be built incorporating construction qualities that fall in between the specifications of these established grades. If the house that is being appraised does not fall exactly in a specific grade, the grade designation should be adjusted as deemed necessary by the use of a percentage factor to reflect quality features that are only slightly better or poorer than the specifications. Example, 1F-5+5 or 1F-5-5. It is not advisable to increase or decrease grade cost figures by more than 5 percent except in the case of the 1F-8 or luxurious residences. It may be necessary to plus a 1F-8 by 25% or more to reflect a realistic value. Also, a 1F-1 may be decreased by more than 5% if necessary.

Photographic examples of typical dwellings throughout the range of construction quality are included in this manual to further illustrate typical grades. However, do not rely solely on the photographs.

DEPRECIATION

Depreciation goes to work immediately upon completion of a building and continues until the building is no longer usable. It is used in the cost approach to value and is the difference, stated as a percentage, between the current replacement cost of the building and its estimated market value.

The three types of depreciation that can effect value are physical deterioration, functional obsolescence and economic obsolescence. These are further broken down into curable and incurable.

Physical depreciation can be detected and recognized by personal inspection. It may consist of wear and tear of such items as gutters and downspouts, windows and screens or there may be a need for painting or redecorating. Loose siding, missing shingles, rusted flashings and valleys, cracked plaster, loose electrical switches and broken fixtures, leaking plumbing or a furnace or boiler in bad repair are among other indications of physical deterioration. These conditions are usually curable and should be a part of the normal maintenance given the structure. There are, however, other evidences of the deterioration of the bone structure of a building, such as a settling of foundations, cracked bearing walls, broken floor joists or sagging rafters that might indicate an incurable condition because it may not be economically sound to repair the defects.

Functional obsolescence reflects the loss of value because of decreased utility or desireability in a structure caused by such things as outmoded plumbing or heating, insufficient electrical outlets or abnormally high ceilings, etc. These are usually curable. Other conditions, such as outmoded architecture, a poor floor plan or columns and bearing walls that interfere with the proper utilization of space may not be possible to cure or may not be curable from an economic standpoint. It is possible to build an undesireable feature

and functional obsolescence into a new building.

Economic obsolescence is caused by forces outside of the building itself, such as business encroachment into a residential district or an influx of inharmoneous inhabitants into a neighborhood. It is very seldom, if ever, curable.

If abnormal depreciation is applied to a building, be sure to explain the reasons on the back of the appraisal card.

If economic obsolescence must be allowed in an affected area, draw a diagonal line through the local index box on the appraisal card and insert the economic factor under the local index factor. Mark the box with an asterisk and explain the reason for the further loss of value under "Remarks".

NORMAL PHYSICAL DEPRECIATION FOR DWELLINGS

AGE	1F-1	1F-2 & 1F-3	1F-4, 1F-5 & 1F-6	1F-7 & 1F-8
1	3%	3%	3%	3%
2	5	4	3	3
3	7	6	5	4
4	10	8	7	5
5	12	10	8	7
6	15	12	10	8
7	18	14	12	9
8	20	16	13	11
9	22	18	14	12
10	25	20	15	13
11	26	21	16	15
12	26	21	17	15
13	27	22	18	16
14	29	23	19	17
15	30	24	21	19
16	32	25	22	20
17	33	26	23	21
18	34	28	24	22
19	35	29	25	22
20	36	30	26	23
21	36	32	28	25
22	38	33	29	26
23	39	34	30	27
24	40	36	31	28
26	43	38	33	30
28	44	39	34	31
30	45	40	35	32
32	47	41	36	32
34	49	44	38	34
36	52	46	40	36
38	53	47	41	37
40	56	49	43	39
42	57	51	44	40
44	58	52	45	40
46	61	54	47	42
48	64	56	49	44
50	65	58	50	45
52	66	59	51	46
54	68	60	52	47
56	69	61	53	48
58	70	62	54	49
60	75	63	55	50
65		70	60	55
70			65	60
75				65
80				70

On dwellings that have exceeded 60 years effective age use extreme caution. These tables are to be used as a guide only under normal conditions. The suggested depreciations may be increased if the structure is in poor condition and decreased if it is in good condition for the age.

EFFECTIVE AGE

Major alterations, additions or rebuilding can extend the useful life of a building and add to its present value. The chronological life is no longer an indication of the amount of depreciation that should be applied. The "effective age" should be the guide.

Neither can the cost of alterations and additions be added directly to the previous appraised value of the building. So a method for determining the new age or "effective age" of a building is stated below:

EXAMPLE I. Building 51 years old was remodeled by 20% 9 years ago:

20% X 9 years = 180
80% X 51 years = 4080
Total 4260
4260 divided by 100% = 43 years effective age

EXAMPLE II. Building 40 years old was remodeled by 30% 1 year ago:

30% X 1 year = 30
70% X 40 years = 2800
Total 2830
2830 divided by 100% = 28 years effective age

Be sure to show the calculation of effective age on the back of the appraisal card.

DESCRIPTION AND PICTURES
OF
GRADE 1F - 1

Houses of this grade can be recognized by their poor design, workmanship, and material. These houses are unplanned and do not meet minimum building standards. They may consist of only one or two rooms with no plumbing or central heating system. This type of construction is generally used for migrant farm labor, very low income urban housing and lakeshore or mountain cabins.

RESIDENTIAL BUILDING SPECIFICATIONS
GRADE 1F-1

FOUNDATION:	Wood sills on masonry or stone piers.
FLOORS:	Single softwood over wood joists of minimum quality.
ROOF:	Low pitch, wood frame, cheap sheathing, roll roofing.
EXTERIOR:	Wood frame, low cost siding.
INTERIOR:	Wood frame, wallboard walls and ceiling.
PLUMBING:	None in base cost schedule.
HEATING:	None in base cost schedule.
ELECTRICAL:	Minimum quality fixtures and outlets.
BASEMENT:	None in base cost schedule. Use 1F-2 schedule.
ATTIC:	None in base cost schedule. Use 1F-2 schedule.
INSULATION:	None in base cost schedule. Add for wall insulation, $0.15, ceiling insulation, $0.10. Apply to square foot of floor area.

GRADE 1F-1 SCHEDULE

BASE COST SCHEDULE

Area in Sq. Ft.	Story 1
300	$6.95
400	6.70
500	6.50
600	6.30
700	6.15
800	6.00
900	5.90
1000	5.80

PLUMBING

Lavatory	$130.
Toilet	150.
Bathtub	190.
Metal shower	105.
Hot water heater	105.

HEATING

	Per sq. ft. 500	1000
Floor or wall furnace	$0.35	$0.25
Gravity hot air	0.40	0.35
Forced hot air	0.60	0.55

FLOOR ADJUSTMENTS

Softwood, double, add ----$0.25 S.F.

GARAGE

Attached	Detached
1 car --$2.10 S.F.	1 car -- $2.30 S.F.
2 car -- 1.50 S.F.	2 car -- 1.90 S.F.

Deduct $0.25 for no concrete floor.

FIREPLACE

Primitive ----$200.

CARPORTS AND PATIOS

Schedule includes $0.25 for concrete floor

Aluminum	$1.15 S.F.
Wood or comp. shingles	1.05 S.F.
Fiber glass	1.20 S.F.

PORCHES

	Per sq. ft.
Concrete or wood, no roof	$1.20
Open roofed and floored	1.65
Glass and frame enclosed	2.40

ROOF

Comp. shingles, add ----$0.10 S.F.

Class 1F-1 houses are found in logging camps, temporary encampments for construction, etc.

DESCRIPTION AND PICTURES
OF
GRADE 1F - 2

Grade 1F - 2 is often found on original homestead building sites. They consist of three, four, or more rooms and occasionally a second floor attic or one-half story.

RESIDENTIAL BUILDING SPECIFICATIONS
GRADE 1F-2

FOUNDATION:	Concrete, concrete block, stone or wood piers.
FLOORS:	Single softwood over minimum joists.
ROOF:	Low pitch, wood frame, 1" spaced sheathing, cheap comp. shingles.
EXTERIOR:	Wood frame. low cost siding or novelty siding.
INTERIOR:	Wood frame, wall board or inferior sheet rock walls and ceiling.
PLUMBING:	Four low cost fixtures; toilet, lavatory, kitchen sink, and water heater.
ELECTRICAL:	Minimum grade fixtures and wiring.
HEATING:	None in base cost schedule.
BASEMENT:	None in base cost schedule.
ATTIC:	None in base cost schedule.
INSULATION:	None in base cost schedule. Add for wall insulation, $0.15, ceiling insulation, $0.10. Apply to square foot of floor area.

GRADE 1F-2 SCHEDULE

BASE COST SCHEDULE

Area in Sq. Ft.	Stories 1	Stories ½	2nd	Basement Unfinished
300	$9.55	$3.80	$4.55	$2.30
400	9.20	3.45	4.40	2.10
500	8.90	3.15	4.25	2.10
600	8.65	2.85	4.15	2.00
700	8.45	2.80	4.05	1.90
800	8.30	2.75	3.95	1.80
900	8.10	2.70	3.85	1.70
1000	8.00	2.65	3.80	1.65

PORCHES AND BALCONIES

	Per sq. ft.
Concrete or wood, no roof	$1.60
Open, roofed and floored	2.25
Glass and frame enclosed	3.15
Balcony and roof	2.05
Balcony, less roof	1.15
Wood stairway, per flight	50.00

CARPORTS AND PATIOS

	Per sq. ft.
Schedule includes $0.30 for concrete floor	
Aluminum	$1.15
Wood or comp. shingles	1.05
Fiber glass	1.20

ATTIC SCHEDULE

Attic cost = $1.50 per sq. ft.

ADJUSTMENTS TO 1F-2 COST SCHEDULE

PLUMBING

Lavatory	$130.
Toilet	150.
Bathtub	190.
Metal shower	105.

WALL VENEER - ALL GRADES

Per sq. ft. of wall area	
Face brick	$1.50
Roman brick	1.35
Used brick	1.25
Imitation flagstone	1.05
Local stone	3.90
Rubble stone	3.00

HEATING

Per sq. ft. of heated area	800	1200	1600
Floor or wall furnace	$ .35	$ .25	$ .25
Gravity hot air	.40	.35	.30
Forced hot air	.65	.60	.55

FIREPLACE & STACK

1 Story stack ---------- $890.

FLOOR ADJUSTMENTS

Double floor, add ---------- $0.30 S.F.

ROOF ADJUSTMENTS

Wood shingles, add ---------- $0.25 S.F.

GARAGE

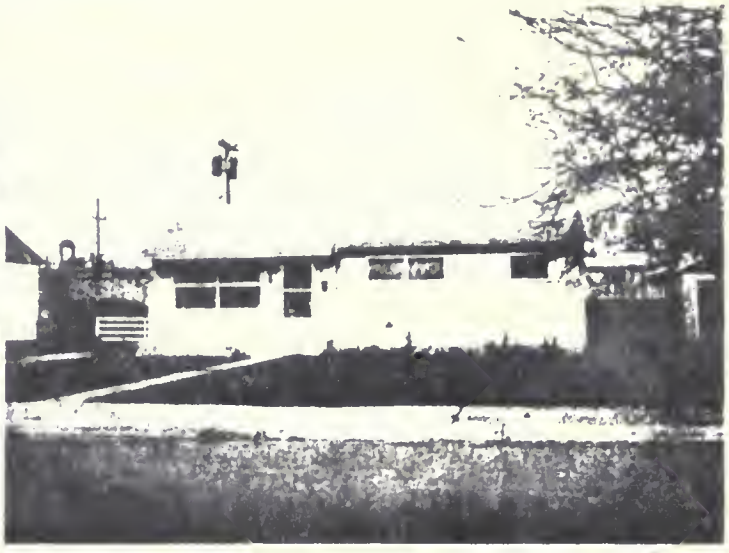
FOUNDATION:	Concrete block, stone or wood piers. (Deduct $0.30 for no floor.)
WALLS AND ROOF:	Conforms to residential construction.
DOORS:	Hinged or overhead type.
HEATING:	None in base cost. (Add $0.15 per sq. ft. for heat.)
ELECTRICAL:	Included in base cost. (Deduct $0.10 per sq. ft. for no electricity.)

GARAGE

Attached	Detached
1 car ---$2.90 S.F.	1 car ---$3.15 S.F.
2 car --- 2.10 S.F.	2 car --- 2.60 S.F.

Driveway: $0.45 per sq. ft.

DESCRIPTION AND PICTURES
OF
GRADE 1F - 3



1F - 3 Grade meets, but does not exceed minimum building code requirements. Interior and exterior finishes are plain and inexpensive. Windows are at a minimum, paint and workmanship are generally poor. This grade of house is generally occupied by the lower income families and offers fair housing for the money spent.

RESIDENTIAL BUILDING SPECIFICATIONS
GRADE 1F-3

FOUNDATION:	6" concrete or concrete block perimeter walls.
FLOORS:	Softwood flooring, shiplap or plywood over 2" x 6" floor joists.
ROOF:	Medium to low pitch, sheathing, fair wood or comp. shingles.
EXTERIOR:	Wood frame, sheathing, fair grade of siding, painted.
INTERIOR:	Drywall or equivalent, few closets; very plain.
PLUMBING:	Five low cost fixtures; toilet, lavatory, bathtub, kitchen sink, and water heater.
ELECTRICAL:	Plain fixtures and few outlets.
BASEMENT:	None in base cost schedule.
ATTIC:	None in base cost schedule.
HEATING:	None in base cost schedule.
INSULATION:	None in base cost schedule. Add for wall insulation, $0.15, ceiling insulation, $0.10. Apply to square foot of floor area.

GRADE 1F-3 SCHEDULE

BASE COST SCHEDULE

Area in Sq. Ft.	Stories 1	Stories ½	Stories 2nd	Basement Unfinished
200				$3.65
300				3.55
400				3.40
500	$12.15	$4.30	$5.80	3.25
600	11.80	3.90	5.65	3.05
700	11.55	3.85	5.50	2.95
800	11.30	3.75	5.40	2.70
900	11.05	3.70	5.30	2.65
1000	10.85	3.60	5.20	2.60
1100	10.65	3.55	5.10	2.50
1200	10.45	3.45	5.00	2.40

ADD FOR FINISH IN BASEMENT APPLY TO FINISHED AREA

1 rm.	2 rm.	3 rm.
$2.80	$3.10	
2.55	2.80	
2.25	2.45	$2.70
2.15	2.40	2.60
2.10	2.30	2.50
2.05	2.25	2.45
2.00	2.20	2.40
1.95	2.15	2.35
1.90	2.10	2.30
1.90	2.10	2.30
1.85	2.05	2.25

Heat is included in finished basement cost schedule.

ATTIC SCHEDULE

Attic cost = $1.90 per square foot.
Add $35 per lineal ft. for dormers.
Heat is included in cost.

DAYLIGHT BASEMENT

Add $2.45 per sq. ft. of daylight basement window area.

PORCHES AND BALCONIES

	Per sq. ft.
Concrete or wood, no roof	$2.20
Open, roofed and floored	3.10
Glass and frame enclosed	4.45
Balcony and roof	2.80
Balcony, less roof	1.70
Wood stairway, per flight	65.00

CARPORTS AND PATIOS

Schedule includes $0.40 for concrete floor

	Per sq. ft.
Aluminum	$1.55
Wood or comp. shingles	1.45
Fiber glass	1.60
Patios Without Roof	
Flagstone floor	1.15
Quarry tile floor	1.70

ADJUSTMENTS TO 1F-3 COST SCHEDULE

PLUMBING

½ Bath	$280.
Lavatory	130.
Toilet	150.
Bathtub	190.
Tiled shower	195.
Metal shower	105.
Hot water heater	105.
Basement rough-in	185.

WALL VENEER - ALL GRADES

Per sq. ft. of wall area	
Face brick	$1.50
Roman brick	1.35
Used brick	1.25
Imitation flagstone	1.05
Local stone	3.90
Rubble stone	3.00

FLOOR ADJUSTMENTS

	Per sq. ft.
Hardwood, add	$0.35
Concrete slab, deduct	.40
Single floor, deduct	.40

ROOF ADJUSTMENTS

	Per sq. ft.
Shakes, light, add	$0.25
Built-up rock, add	.15

HEATING

Per sq. ft. of heated area	800	1200	1600
Floor or wall furnace	$0.35	$0.25	$0.25
Gravity hot air	.40	.35	.30
Forced hot air	.65	.60	.55
Hot water recirculating	.95	.90	.85
Electric baseboard	.55	.55	.50

FIREPLACE & STACK

1 Story stack	$890.
2nd Fireplace on same stack	200.

BUILT-IN APPLIANCES

Range and oven combination	$250.
Counter top range	115.
Oven	200.
Exhaust fan and hood	60.
Refrigerator	200.
Dishwasher	175.
Garbage disposal	65.

See page 47 for more complete appliance price list.

TILE

Plastic or metal ---------- $0.50 sq. ft.

GARAGE

FOUNDATION: Concrete foundation and floor slab. (Deduct $0.40 for no floor.)
WALLS AND ROOF: Conforms to residential construction.
DOORS: Hinged or overhead type.
HEATING: None in base cost. (Add $0.15 per sq. ft. for heat.)
ELECTRICAL: Included in base cost. (Deduct $0.10 per sq. ft. for no electricity.)

GARAGE

Attached	Detached
1 car -- $4.00 S.F.	1 car -- $4.30 S.F.
2 car -- 2.90 S.F.	2 car -- 3.55 S.F.
3 car -- 2.20 S.F.	3 car -- 2.80 S.F.

Add $0.30 per sq. ft. of floor area for garage lining.

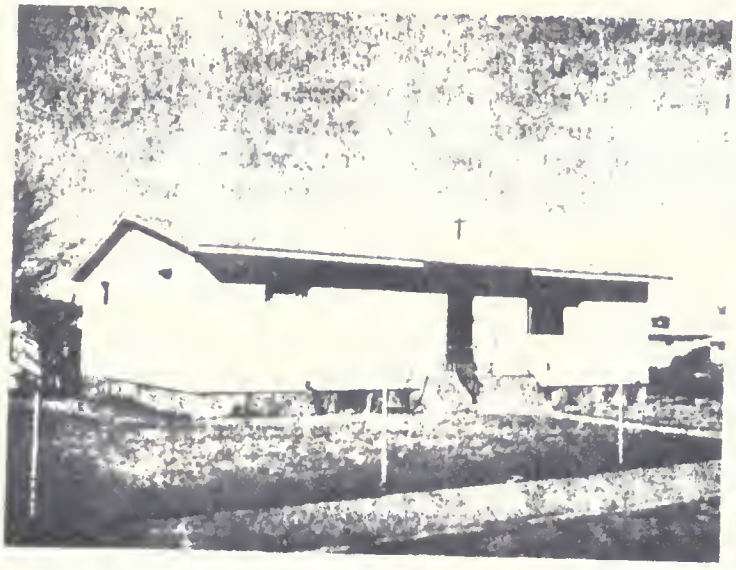
Driveway: $0.55 per sq. ft.

BASEMENT GARAGE

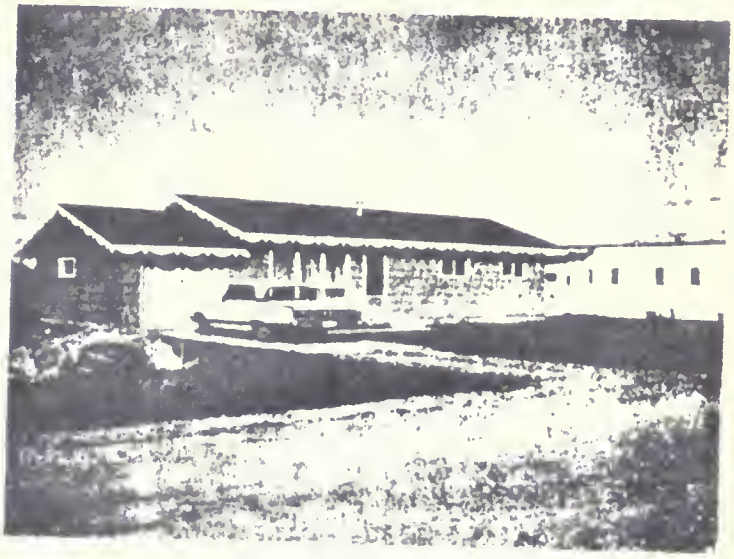
1 car	$1.70 S.F.
2 car	1.40 S.F.
3 car	1.15 S.F.

Cost includes partition, fire wall, overhead doors, drain, and electricity.

DESCRIPTION AND PICTURES OF GRADE 1F - 4



1F - 4 Grade offers housing of fair to low average quality. Low cost refinements are often incorporated to attract prospective owners. Such refinements may include low quality hardwood floors, extra ½ bath, some ornamentation at front of house and a small amount of interior paneling. Homes in this grade will meet VA and FHA standards.



RESIDENTIAL BUILDING SPECIFICATIONS
GRADE 1F-4

FOUNDATION:	6" good or 8" fair concrete perimeter walls.
FLOORS:	Plywood and asphalt tile or vertical grain fir, 2" x 8" joists.
ROOF:	Medium pitch, frame, 3/4" sheathing, average wood or comp. shingles.
EXTERIOR:	Wood frame, sheathing, average siding and paint, or pumice block.
INTERIOR:	Plaster or drywall, average trim, average closets and storage.
PLUMBING:	Five average fixtures; toilet, lavatory, bathtub, kitchen sink and water heater.
ELECTRICAL:	Average fixtures and outlets, range and dryer wiring and outlets.
HEATING:	None in base cost schedule.
BASEMENT:	None in base cost schedule.
ATTIC:	None in base cost schedule.
INSULATION:	Included in base cost schedule.

GRADE 1F-4 SCHEDULE

BASE COST SCHEDULE

Area in Sq. Ft.	Stories 1	Stories 1½	Stories 2nd	Basement Unfinished
200				$4.30
300				4.15
400				4.00
500		$5.15	$7.00	3.80
600		4.70	6.80	3.60
700	$13.80	4.60	6.60	3.45
800	13.55	4.50	6.50	3.20
900	13.30	4.40	6.35	3.10
1000	13.05	4.30	6.25	3.05
1100	12.80	4.25	6.10	2.95
1200	12.50	4.15	6.00	2.85
1300	12.25	4.05	5.90	2.75
1400	12.15	4.00	5.80	2.60
1500	12.10	4.00	5.80	2.50
1600	12.00	3.95	5.75	2.40
1700	11.95	3.95	5.75	2.40

ADD FOR FINISH IN BASEMENT APPLY TO FINISHED AREA

1 rm.	2 rm.	3 rm.
$3.30	$3.65	$
3.00	3.30	
2.65	2.90	$3.20
2.55	2.80	3.05
2.45	2.70	2.95
2.40	2.65	2.90
2.35	2.60	2.80
2.30	2.55	2.75
2.25	2.50	2.70
2.25	2.50	2.70
2.20	2.40	2.65
2.20	2.40	2.65
2.15	2.35	2.60
2.15	2.35	2.60
2.15	2.35	2.60
2.15	2.35	2.60

Heat is included in finished basement cost schedule.

ATTIC SCHEDULE

Attic cost = $2.25 per square foot.
Add $40 per lineal ft. for dormers.
Heat is included in cost.

DAYLIGHT BASEMENT

Add $2.45 per sq. ft. of daylight basement window area.

PORCHES AND BALCONIES

	Per sq. ft.
Concrete or wood, no roof	$2.65
Open, roofed and floored	3.70
Glass and frame enclosed	5.35
Balcony and roof	3.40
Balcony, less roof	2.05
Wood stairway, per flight	$1.00

CARPORTS AND PATIOS

Schedule includes $0.55 for concrete floor.

	Per sq. ft.
Aluminum	$1.85
Wood or comp. shingles	1.70
Fiber glass	1.95
Patios Without Roof	
Flagstone floor	1.35
Quarry tile floor	2.05

PLUMBING

½ Bath	$335.
Lavatory	155.
Toilet	180.
Bathtub	225.
Tiled shower	235.
Metal shower	125.
Hot water heater	125.
Basement rough-in	250.

WALL VENEER - ALL GRADES

Per sq. ft. of wall area	
Face brick	$1.50
Roman brick	1.35
Used brick	1.25
Imitation flagstone	1.05
Local stone	3.90
Rubble stone	3.00

FLOOR ADJUSTMENTS

	Per sq. ft.
Concrete slab, deduct	$0.25

ROOF ADJUSTMENTS

	Per sq. ft.
Shakes, light - add	$0.20
Shakes, heavy - add	.30
Built-up rock - add	.15

HEATING

	Per sq. ft. of heated area 800	1200	1600	2000
Floor or wall furnace	$ .40	$ .30	$ .25	
Gravity hot air	.50	.40	.35	
Forced hot air	.75	.70	.65	$ .65
Hot water recirculating	1.15	1.10	1.05	1.00
Electric baseboard	.70	.65	.60	.55
Combined air-heat cond.	1.60	1.50	1.45	1.40
Air cond. (Refrigeration)	1.10	1.10	1.00	.95

FIREPLACE & STACK

1 Story stack	$1065.
1½ Story stack	1180.
2 Story stack	1290.
1 Story with 2nd fireplace in basement	1420.
2nd Fireplace on same stack	240.

BUILT-IN APPLIANCES

Range and oven combination	$250.
Counter top range	115.
Oven	200.
Exhaust fan and hood	60.
Refrigerator	200.
Dishwasher	175.
Garbage disposal	65.

See page 47 for more complete appliance price list.

TILE

Ceramic - add	$1.20 sq. ft.
Plastic or metal	Base

GARAGE

FOUNDATION: Concrete foundation and floor slab. (Deduct $0.55 for no floor.)
WALLS AND ROOF: Conforms to residential construction.
DOORS: Hinged or overhead type - one side door.
HEATING: None in base cost. (Add $0.15 per sq. ft. for heat.)
ELECTRICAL: Included in base cost. (Deduct $0.10 per sq. ft. for no electricity.)

GARAGE

Attached	Detached
1 car -- $4.75 S.F.	1 car -- $5.15 S.F.
2 car -- 3.45 S.F.	2 car -- 4.25 S.F.
3 car -- 2.60 S.F.	3 car -- 3.35 S.F.

Add $0.35 per sq. ft. of floor area for garage lining.

Driveway: $0.55 per sq. ft.

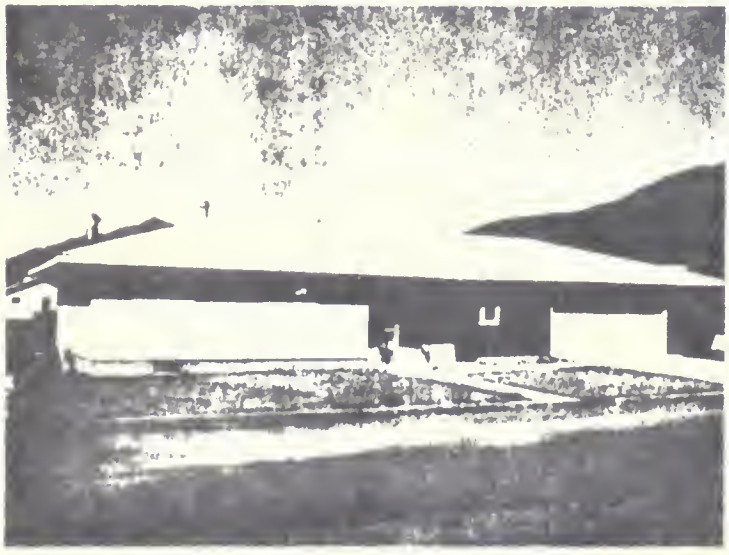
BASEMENT GARAGE

1 car	$2.05 sq. ft.
2 car	1.65 sq. ft.
3 car	1.35 sq. ft.

Cost includes partition, fire wall, overhead doors, drain and electricity.

DESCRIPTION AND PICTURES
OF
GRADE 1F - 5

This grade is generally found in better areas for people in the middle income group and is built by professional contractors. It is also found in better class speculative developments. In general, architectural design, workmanship, and materials are of average quality. Trim and millwork may be hardwood. Interior construction and finishes are good. The exterior of the house may have some brick or stone ornamentation.



RESIDENTIAL BUILDING SPECIFICATIONS
GRADE 1F-5

FOUNDATION:	8" perimeter walls.
FLOORS:	Hardwood or equivalent over sub-floor and 2" x 10" floor joists.
ROOF:	Medium pitch, solid sheathing, good comp. or wood shingles.
EXTERIOR:	Wood frame, good sheathing, good siding, pumice block or equivalent.
INTERIOR:	Frame, plaster or equal, good trim, ample closets and storage.
PLUMBING:	Five good fixtures; toilet, lavatory, bathtub, kitchen sink, and water heater.
ELECTRICAL:	Good fixtures and outlets, range and dryer wiring and outlets.
HEATING:	None in base cost schedule.
BASEMENT:	None in base cost schedule.
ATTIC:	None in base cost schedule.
INSULATION:	Included in base cost schedule.

GRADE 1F-5 SCHEDULE

BASE COST SCHEDULE

Area in Sq. Ft.	Stories 1	Stories 1½	Stories 2nd	Basement Unfinished
200				$4.30
300				4.15
400				4.00
500				3.80
600				3.60
700				3.45
800	$15.05	$5.00	$7.20	3.20
900	14.75	4.90	7.05	3.10
1000	14.50	4.80	6.95	3.05
1100	14.20	4.70	6.80	2.95
1200	13.90	4.60	6.65	2.85
1300	13.60	4.50	6.55	2.75
1400	13.50	4.45	6.45	2.60
1500	13.45	4.45	6.45	2.50
1600	13.35	4.40	6.40	2.40
1700	13.25	4.40	6.40	2.40
1800	13.20	4.35	6.35	2.35
1900	13.10	4.35	6.30	2.35
2000	13.05	4.30	6.25	2.30

ADD FOR FINISH IN BASEMENT APPLY TO FINISHED AREA

Area in Sq. Ft.	1 rm.	2 rm.	3 rm.
200	$3.30	$3.65	
300	3.00	3.30	
400	2.65	2.90	$3.20
500	2.55	2.80	3.05
600	2.45	2.70	2.95
700	2.40	2.65	2.90
800	2.35	2.60	2.80
900	2.30	2.55	2.75
1000	2.25	2.50	2.70
1100	2.25	2.50	2.70
1200	2.20	2.40	2.65
1300	2.20	2.40	2.65
1400	2.15	2.35	2.60
1500	2.15	2.35	2.60
1600	2.15	2.35	2.60
1700	2.15	2.35	2.60
1800	2.10	2.30	2.50
1900	2.10	2.30	2.50
2000	2.10	2.30	2.50

Heat is included in finished basement cost schedule.

ATTIC SCHEDULE

Attic cost = $2.50 per square foot.
Add $45 per lineal ft. for dormers.
Heat is included in cost.

DAYLIGHT BASEMENT

Add $2.45 per sq. ft. of daylight basement window area.

PORCHES AND BALCONIES

	Per sq. ft.
Concrete or wood, no roof	$2.95
Open, roofed and floored	4.10
Glass and frame enclosed	5.95
Balcony and roof	3.75
Balcony, less roof	2.25
Wood stairway, per flight	90.00

CARPORTS AND PATIOS

Schedule includes $0.55 for concrete floor.

	Per sq. ft.
Aluminum	$2.05
Wood or comp. shingles	1.90
Fiber glass	2.15
Patios Without Roof	
Flagstone floor	1.50
Quarry tile floor	2.25

ADJUSTMENTS TO 1F-5 COST SCHEDULE

PLUMBING

½ Bath	$370.
Lavatory	170.
Toilet	200.
Bathtub	250.
Tiled shower	260.
Metal shower	140.
Hot water heater	140.
Basement rough-in	250.

WALL VENEER - ALL GRADES

Per sq. ft. of wall area	
Face brick	$1.50
Roman brick	1.35
Used brick	1.25
Imitation flagstone	1.05
Local stone	3.90
Rubble stone	3.00

FLOOR ADJUSTMENTS

	Per sq. ft.
Softwood, deduct	$0.15
Concrete slab, deduct	.50

ROOF ADJUSTMENTS

	Per sq. ft.
Shakes, light - add	$0.15
Shakes, heavy - add	.25
Built-up rock - add	.15

HEATING

	Per sq. ft. of heated area			
	800	1200	1600	2000
Floor or wall furnace	$ .45	$ .35	$ .30	
Gravity hot air	.55	.45	.40	
Forced hot air	.85	.80	.75	$ .70
Hot water recirculating	1.25	1.20	1.15	1.10
Electric baseboard	.75	.70	.65	.60
Combined air-heat cond.	2.00	1.90	1.85	1.80
Air cond. (Refrigeration)	1.35	1.30	1.25	1.20

FIREPLACE & STACK

1 Story stack	$1185.
1½ Story stack	1310.
2 Story stack	1435.
1 Story with 2nd fireplace in basement	1575.
2nd Fireplace on same stack	265.

BUILT-IN APPLIANCES

Range and oven combination	$320.
Counter top range	140.
Oven	275.
Exhaust fan and hood	75.
Refrigerator	300.
Dishwasher	250
Garbage disposal	75.

See page 47 for more complete appliance price list.

TILE

Ceramic tile add	$1.30 sq. ft.
Plastic or metal	Base

GARAGE

FOUNDATION:	Concrete foundation and floor slab. (Deduct $0.55 for no floor.)
WALLS AND ROOF:	Conforms to residential construction.
DOORS:	Overhead type - one side door.
HEATING:	None in base cost. (Add $0.15 per sq. ft. for heat.)
ELECTRICAL:	Included in base cost. (Deduct $0.10 per sq. ft. for no electricity.)

GARAGE

Attached	Detached
1 car -- $5.30 S.F.	1 car -- $5.75 S.F.
2 car -- 3.85 S.F.	2 car -- 4.70 S.F.
3 car -- 2.90 S.F.	3 car -- 3.70 S.F.

Add $0.40 per sq. ft. of floor area for garage lining.

Driveway: $0.55 per sq. ft.

BASEMENT GARAGE

1 car	$2.25 S.F.
2 car	1.85 S.F.
3 car	1.50 S.F.

Cost includes partition, fire wall, overhead doors, drain and electricity.

DESCRIPTION AND PICTURES
OF
GRADE 1F - 6

Grade 1F - 6 will have better closet and cabinet facilities than grade 1F - 5, more ornamentation and slightly better workmanship and materials.

RESIDENTIAL BUILDING SPECIFICATIONS
GRADE 1F-6

FOUNDATION:	8" concrete or equivalent perimeter and center walls.
FLOORS:	Hardwood, 1" sub-floor over 2" x 10" joists.
ROOF:	Medium to high pitch, 3/4" to 1" plywood sheathing, wood or comp. shingles.
EXTERIOR:	Wood frame, good sheathing, good cedar siding or equivalent.
INTERIOR:	Frame, plaster, drywall or paneling, hardwood trim and cabinets.
PLUMBING:	Five good fixtures; bathtub, toilet, lavatory, kitchen sink, water heater, and laundry facilities.
ELECTRICAL:	Very good fixtures, special outlets, range and dryer wiring and outlets.
HEATING:	None in base cost schedule.
BASEMENT:	None in base cost schedule.
ATTIC:	None in base cost schedule.
INSULATION:	Included in base cost schedule.

GRADE 1F-6 SCHEDULE

BASE COST SCHEDULE

Area in Sq. Ft.	Stories 1	1½	2nd	Basement Unfinished
200				$4.30
300				4.15
400				4.00
500		$6.25	$8.55	3.80
600		5.70	8.30	3.60
700		5.60	8.10	3.45
800	$16.55	5.50	7.90	3.20
900	16.25	5.40	7.75	3.10
1000	15.95	5.30	7.65	3.05
1100	15.60	5.15	7.50	2.95
1200	15.30	5.05	7.30	2.85
1300	14.95	4.95	7.20	2.75
1400	14.85	4.90	7.10	2.60
1500	14.80	4.90	7.10	2.50
1600	14.70	4.85	7.05	2.40
1700	14.60	4.85	7.05	2.40
1800	14.50	4.80	7.00	2.35
1900	14.45	4.80	6.95	2.35
2000	14.35	4.75	6.90	2.30

ADD FOR FINISH IN BASEMENT APPLY TO FINISHED AREA

1 rm.	2 rm.	3 rm.
$3.30	$3.65	
3.00	3.30	
2.65	2.90	$3.20
2.55	2.80	3.05
2.45	2.70	2.95
2.40	2.65	2.90
2.35	2.60	2.80
2.30	2.55	2.75
2.25	2.50	2.70
2.25	2.50	2.70
2.20	2.40	2.65
2.20	2.40	2.65
2.15	2.35	2.60
2.15	2.35	2.60
2.15	2.35	2.60
2.15	2.35	2.60
2.10	2.30	2.50
2.10	2.30	2.50
2.10	2.30	2.50

Heat is included in finished basement cost schedule.

ATTIC SCHEDULE

Attic cost = $2.75 per square foot.
Add $50 per lineal ft. for dormers.
Heat is included in cost.

PORCHES AND BALCONIES

	Per sq. ft.
Concrete or wood, no roof	$3.25
Open, roofed and floored	4.50
Glass and frame enclosed	6.55
Balcony and roof	4.15
Balcony, less roof	2.50
Wood stairway, per flight	100.00

DAYLIGHT BASEMENT

Add $2.45 per sq. ft. of daylight basement window area.

CARPORTS AND PATIOS

Schedule includes $0.55 for concrete floor.

	Per sq. ft.
Aluminum	$2.25
Wood or comp. shingles	2.10
Fiber glass	2.35
Patios Without Roof	
Flagstone floor	1.65
Quarry tile floor	2.50

ADJUSTMENTS TO 1F-6 COST SCHEDULE

PLUMBING

½ Bath	$405.
Lavatory	185.
Toilet	220.
Bathtub	275.
Tiled shower	285.
Metal shower	155.
Hot water heater	155.
Basement rough-in	250.

WALL VENEER - ALL GRADES

Per sq. ft. of wall area	
Face brick	$1.50
Roman brick	1.35
Used brick	1.25
Imitation flagstone	1.05
Local stone	3.90
Rubble stone	3.00

FLOOR ADJUSTMENTS

	Per sq. ft.
Concrete slab, deduct-	$0.55

ROOF ADJUSTMENTS

	Per sq. ft.
Shakes, heavy - add	$0.40

HEATING

	Per sq. ft. of heated area 800	1200	1600	2000
Floor or wall furnace	$ .50	$ .40	$ .35	
Gravity hot air	.60	.50	.45	
Forced hot air	.95	.90	.85	$ .75
Hot water recirculating	1.35	1.30	1.25	1.20
Electric baseboard	.85	.75	.70	.65
Combined air-heat cond.	2.50	2.35	2.30	2.25
Air cond. (Refrigeration)-	1.70	1.60	1.55	1.50

FIREPLACE & STACK

1 Story stack	$1305.
1½ Story stack	1440.
2 Story stack	1580.
1 Story with 2nd fireplace in basement	1735.
2nd Fireplace on same stack	290.

BUILT-IN APPLIANCES

Range and oven combination	$350.
Counter top range	140.
Oven	275.
Exhaust fan and hood	75.
Refrigerator	300.
Dishwasher	250.
Garbage disposal	75.

See page 47 for more complete appliance price list.

TILE

Ceramic tile	Base

GARAGE

FOUNDATION:	Concrete foundation and floor slab. (Deduct $0.55 for no floor.)
WALLS AND ROOF:	Conforms to residential construction.
DOORS:	Overhead type - one side door.
HEATING:	None in base cost. (Add $0.15 per sq. ft. for heat.)
ELECTRICAL:	Included in base cost. (Deduct $0.10 per sq. ft. for no electricity.)

GARAGE

Attached	Detached
1 car --$5.85 S.F.	1 car --$6.35 S.F.
2 car -- 4.25 S.F.	2 car -- 5.15 S.F.
3 car -- 3.20 S.F.	3 car -- 4.05 S.F.

Add $0.45 per sq. ft. of floor area for garage lining.

Driveway: $0.55 per sq. ft.

BASEMENT GARAGE

1 car	$2.50 S.F.
2 car	2.05 S.F.
3 car	1.65 S.F.

Cost includes partition, fire wall, overhead doors, drain and electricity.

DESCRIPTION AND PICTURES
OF
GRADE 1F - 7

Residences of this type are commonly found in the best residential districts. They are custom designed by professional architects and built by reputable building contractors. All materials and labor are of the best quality and all conveniences for better living have been incorporated into the design of this grade. Integration of the house and lot has been given much thought. The front elevation of the house features ornamention of excellent quality and the contemporary type will feature a large expanse of good quality glass and stone veneers.

RESIDENTIAL BUILDING SPECIFICATIONS
GRADE 1F-7

FOUNDATION: 8" reinforced concrete perimeter and center walls.
FLOORS: Good hardwood, 1" sub-floor over 2" x 10" joists.
ROOF: Hip, gable or flat with lam. beams and T & G deck, light cedar shakes, good cedar shakes or very good comp. shingles.
EXTERIOR: Wood frame, good sheathing and cedar siding or its equivalent.
INTERIOR: Wood frame, expertly finished plaster or drywall, hardwood paneling, trim and cabinets, formica counter tops, ample linen closets and storage.
PLUMBING: Five high quality fixtures; bathtub, lavatory, toilet, kitchen sink, water heater, and laundry facilities.
ELECTRICAL: Very good with special outlets and fixtures.
HEATING: None in base cost schedule.
BASEMENT: None in base cost schedule.
ATTIC: None in base cost schedule.
INSULATION: Included in base cost schedule.

GRADE 1F-7 SCHEDULE

BASE COST SCHEDULE

Area in Sq. Ft.	Stories 1	Stories ½	Stories 2nd	Basement Unfinished
200				$4.75
300				4.55
400				4.40
500		$7.15	$9.70	4.20
600		6.50	9.45	3.95
700		6.40	9.20	3.80
800		6.25	9.00	3.50
900		6.15	8.80	3.40
1000	$18.15	6.00	8.70	3.35
1100	17.75	5.90	8.50	3.25
1200	17.40	5.75	8.30	3.15
1300	17.00	5.65	8.20	3.05
1400	16.90	5.60	8.05	2.85
1500	16.80	5.60	8.05	2.75
1600	16.70	5.50	8.00	2.65
1700	16.55	5.50	8.00	2.65
1800	16.50	5.45	7.95	2.60
1900	16.45	5.45	7.90	2.60
2000	16.30	5.40	7.80	2.55
2100	16.15			
2200	16.15			
2300	16.10			
2400	16.00			
2500	15.95			
2600	15.90			
2700	15.85			
2800	15.75			
2900	15.70			
3000	15.65			

ADD FOR FINISH IN BASEMENT APPLY TO FINISHED AREA

1 rm.	2 rm.	3 rm.
$3.65	$4.00	
3.30	3.65	
2.90	3.20	$3.50
2.80	3.10	3.35
2.70	3.00	3.25
2.65	2.90	3.20
2.60	2.85	3.10
2.55	2.55	3.05
2.50	2.75	3.00
2.50	2.75	3.00
2.40	2.65	2.90
2.40	2.65	2.90
2.35	2.60	2.80
2.35	2.60	2.80
2.35	2.60	2.80
2.35	2.60	2.80
2.30	2.55	2.75
2.30	2.55	2.75
2.30	2.55	2.75

Heat is included in finished basement cost schedule.

PORCHES AND BALCONIES

	Per sq. ft.
Concrete or wood, no roof	$3.70
Open, roofed and floored	5.15
Glass and frame enclosed	7.45
Balcony and roof	4.70
Balcony, less roof	2.80
Wood stairway, per flight	115.00

CARPORTS AND PATIOS

Schedule includes $0.55 for concrete floor.

	Per sq. ft.
Aluminum	$2.55
Wood or comp. shingles	2.40
Fiber glass	2.70
Patios Without Roof	
Flagstone floor	1.90
Quarry tile floor	2.80

ATTIC SCHEDULE

Attic cost = $3.15 per sq. ft. Add $55 per lineal ft. for dormers. Heat is included in cost.

PLUMBING

½ Bath	$465.
Lavatory	215.
Toilet	250.
Bathtub	315.
Tiled shower	325.
Metal shower	175.
Hot water heater	175.
Basement rough-in	250.

WALL VENEER - ALL GRADES

Per sq. ft. of wall area	
Face brick	$1.50
Roman brick	1.35
Used brick	1.25
Imitation flagstone	1.05
Local stone	3.90
Rubble stone	3.00

FLOOR ADJUSTMENTS

	Per sq. ft.
Terrazzo, add	$1.55
Concrete slab, deduct	.60
Flagstone, add	1.15

DAYLIGHT BASEMENT

Add $2.75 per sq. ft. of daylight basement window area.

HEATING

	Per sq. ft. of heated area 800	1200	1600	2000
Gravity hot air	$ .70	$ .55	$ .50	$ .45
Forced hot air	1.05	1.00	.95	.90
Hot water recirculating	1.55	1.50	1.45	1.40
Electric baseboard	.95	.90	.80	.75
Combined air-heat cond.	2.70	2.60	2.55	2.50
Air cond. (Refrigeration)	2.00	1.90	1.80	1.75

FIREPLACE & STACK

1 Story stack	$1480.
1½ Story stack	1640.
2 Story stack	1795.
1 Story with 2nd fireplace in basement	1970.
2nd Fireplace on same stack	330.

BUILT-IN APPLIANCES

Range and oven combination	$450.
Counter top range	175.
Oven	40
Exhaust fan and hood	125.
Refrigerator	400.
Dishwasher	325.
Garbage disposal	100.

See page 47 for more complete appliance price list.

GARAGE

FOUNDATION: Concrete foundation and floor slab. (Deduct $0.55 for no floor.)
WALLS AND ROOF: Conforms to residential construction.
DOORS: Overhead type - one side door.
HEATING: None in base cost. (Add $0.30 per sq. ft. for heat.)
ELECTRICAL: Included in base cost. (Deduct $0.10 per sq. ft. for no electricity.)

GARAGE

Attached	Detached
1 car --$6.65 S.F.	1 car --$7.20 S.F.
2 car -- 4.80 S.F.	2 car -- 5.90 S.F.
3 car -- 3.65 S.F.	3 car -- 4.65 S.F.

Add $0.50 per sq. ft. of floor area for garage lining.

Driveway: $0.55 per sq. ft.

BASEMENT GARAGE

1 car	$2.80 S.F.
2 car	2.30 S.F.
3 car	1.90 S.F.

Cost includes partition, fire wall, overhead doors, drain and electricity.

DESCRIPTION AND PICTURES
OF
GRADE 1F - 8

Grade 1F - 8 incorporates an exceptional amount of excellent planning and quality throughout.

RESIDENTIAL BUILDING SPECIFICATIONS
GRADE 1F-8

FOUNDATION: 10" reinforced concrete perimeter and center walls.
FLOORS: Hardwood, 1" sub-floor on 2" x 12" joists 16" on center.
ROOF: Medium to steep pitch, 1" solid sheathing, heavy shakes.
EXTERIOR: Wood frame, wood sheathing, good 8" to 10" vertical grain siding.
INTERIOR: Frame, plaster or hardwood paneling, trim, cabinets, closets, ample storage and other extras.
PLUMBING: Five excellent quality fixtures; lavatory, toilets, bathtub, kitchen sink, water heater, and laundry facilities.
ELECTRICAL: Excellent quality fixtures and many special outlets.
HEATING: None in base cost schedule.
BASEMENT: None in base cost schedule.
ATTIC: None in base cost schedule.
INSULATION: Included in base cost schedule.

GRADE 1F-8 SCHEDULE

BASE COST SCHEDULE

Area in Sq. Ft.	Stories 1	Stories 1½	Stories 2nd	Basement Unfinished
200				$4.75
300				4.55
400				4.40
500		$7.70	$10.45	4.20
600		7.00	10.20	3.95
700		6.90	9.95	3.80
800		6.75	9.70	3.50
900		6.60	9.50	3.40
1000		6.50	9.40	3.35
1100	$19.15	6.35	9.20	3.25
1200	18.75	6.20	9.00	3.15
1300	18.35	6.10	8.85	3.05
1400	18.25	6.00	8.70	2.85
1500	18.15	6.00	8.70	2.75
1600	18.05	5.95	8.65	2.65
1700	17.90	5.95	8.65	2.65
1800	17.80	5.85	8.55	2.60
1900	17.75	5.85	8.50	2.60
2000	17.60	5.80	8.45	2.55
2100	17.45			
2200	17.45			
2300	17.40			
2400	17.30			
2500	17.25			
2600	17.20			
2700	17.10			
2800	17.05			
2900	16.95			
3000	16.90			

ADD FOR FINISH IN BASEMENT APPLY TO FINISHED AREA

1 rm.	2 rm.	3 rm.
$3.65	$4.00	
3.30	3.65	
2.90	3.20	$3.50
2.80	3.10	3.35
2.70	3.00	3.25
2.65	2.90	3.20
2.60	2.85	3.10
2.55	2.80	3.05
2.50	2.75	3.00
2.50	2.75	3.00
2.40	2.65	2.90
2.40	2.65	2.90
2.35	2.60	2.80
2.35	2.60	2.80
2.35	2.60	2.80
2.35	2.60	2.80
2.30	2.55	2.75
2.30	2.55	2.75
2.30	2.55	2.75

Heat is included in finished basement cost schedule.

PORCHES AND BALCONIES

	Per sq. ft.
Concrete or wood, no roof	$4.00
Open, roofed and floored	5.55
Glass and frame enclosed	8.05
Balcony and roof	5.05
Balcony, less roof	3.05
Wood stairway, per flight	120.00

CARPORTS AND PATIOS

Schedule includes $0.55 for concrete floor.

	Per sq. ft.
Aluminum	$2.75
Wood or comp. shingles	2.55
Fiber glass	2.90
Patio Without Roof	
Flagstone floor	2.05
Quarry tile floor	3.05

ATTIC SCHEDULE

Attic cost = $4.25 per sq. ft. Add $55 per lineal ft. for dormers. Heat is included in cost.

PLUMBING

½ Bath	$500.
Lavatory	230.
Toilet	270.
Bathtub	340.
Tiled shower	350.
Metal shower	190.
Hot water heater	190.
Basement rough-in	250.

WALL VENEER - ALL GRADES

	Per sq. ft. of wall area
Face brick	$1.50
Roman brick	1.35
Used brick	1.25
Imitation flagstone	1.05
Local stone	3.90
Rubble stone	3.00

FLOOR ADJUSTMENTS

	Per sq. ft.
Concrete slab, deduct	-$0.65

ROOF ADJUSTMENTS

	Per sq. ft.
Comp. shingle, deduct	-$0.40

DAYLIGHT BASEMENT

Add $2.75 per sq. ft. of daylight basement window area.

HEATING

	Per sq. ft. of heated area 800	1200	1600	2000
Gravity hot air	$ .75	$ .60	$ .55	$ .50
Forced hot air	1.15	1.10	1.05	.95
Hot water recirculating	1.65	1.60	1.55	1.50
Electric baseboard	.95	.90	.80	.75
Combined air-heat cond.	3.00	2.90	2.85	2.75
Air cond. (Refrigeration)	2.20	2.10	2.00	1.95

FIREPLACE & STACK

1 Story stack	$1600.
1½ Story stack	1770.
2 Story stack	1940.
1 Story with 2nd fireplace in basement	2125.
2nd Fireplace on same stack	360.

BUILT-IN APPLIANCES

Range and oven combination	$450.
Counter top range	175.
Oven	400.
Exhaust fan and hood	125.
Refrigerator	400.
Dishwasher	325.
Garbage disposal	100.

See page 47 for more complete appliance price list.

GARAGE

FOUNDATION: Concrete foundation and floor slab. (Deduct $0.55 for no floor.)
WALLS AND ROOF: Conforms to residential construction.
DOORS: Overhead type - one side door.
HEATING: None in base cost. (Add $0.30 per sq. ft. for heat.)
ELECTRICAL: Included in base cost. (Deduct $0.15 per sq. ft. for no electricity.)

GARAGE

Attached	Detached
1 car -- $7.15 S.F.	1 car -- $7.75 S.F.
2 car -- 5.20 S.F.	2 car -- 6.35 S.F.
3 car -- 3.90 S.F.	3 car -- 5.00 S.F.

Add $0.55 per sq. ft. of floor area for garage lining.

Driveway: $0.55 per sq. ft.

BASEMENT GARAGE

1 car	$3.05 S.F.
2 car	2.50 S.F.
3 car	2.05 S.F.

Cost includes partition, fire wall, overhead doors, drain and electricity.

MISCELLANEOUS BUILT-IN CONSTRUCTION

FIXTURE	QUALITY LOW	AVERAGE	GOOD
ELECTRONIC OVEN	$550	$700	$850
RADIO INTERCOM (BASE UNIT)	125	150	175
(Add per station or satellite)	25	30	35
THREE UNIT VACUUM CLEANER SYSTEM	425	475	525
(Add for extra outlet)	50	60	75
ELECTRIC BATHROOM HEATER	40	60	80
ELECTRIC DUMBWAITER	600	700	850
MANUAL DUMBWAITER	250	300	350
ELECTRIC EYE GARAGE DOOR OPENER	125	150	160
RADIO CONTROL GARAGE DOOR OPENER	---	265	265
PREFAB FOLDING STAIRWAY	45	60	---
LAUNDRY TUB (SINGLE)	120	135	155
LAUNDRY TUB (DOUBLE)	145	170	200
EXHAUST FAN	35	40	50
MIXER BLENDER FOOD CENTER	70	80	90
ARTIFICAL FIREPLACE (WOOD BURNING)	500	650	800
PREFAB WALL HUNG FIREPLACE (WOOD BURNING)	---	450	---
PREFAB WALL HUNG FIREPLACE (GAS)	---	275	---
KITCHEN SINK	130	175	235
WROUGHT IRON RAILING (24" HIGH)		$3.85 PER LINEAL FOOT	
(ADD FOR CORNER, END AND LINE POST)		3.50 EACH	
ORNAMENTAL IRON (ORNATE PATTERN COLUMNS)		20.00 EACH FOR 12" WIDE BY 8' HIGH SECTION.	

COST DISTRIBUTION BY PERCENTAGE OF COMPONENTS

	Percent of Base Cost	Base Cost Per Square Foot
Plans and permits	2.6	.37
Excavation, forms, concrete and backfill	5.0	.72
Lumber	13.9	2.02
Hardware	1.3	.19
Carpenter	13.5	1.96
Roofing	5.0	.73
Plumbing	12.2	1.77
Sheet metal	1.1	.16
Electrical	6.9	1.00
Drywall or plaster	11.8	1.71
Floors	8.6	1.24
Sash, doors, shutters and cabinets	9.2	1.34
Painting	6.4	.93
Sewer connection and clean up	2.5	.36
	100.0%	$14.50

This breakdown represents a one story 1F-5 house, with no basement, containing 1000 square feet. Other components such as heat, built-in appliances, fireplaces, porches, etc., are not included and are priced separately in the manual. General contractor's overhead and profit of 13.0% is included in the above figures.

A-FRAME TYPE RESIDENCES

LOW GRADE

AVERAGE GRADE

GOOD GRADE

EXCELLENT GRADE

CHALET OR
A-FRAME TYPE SUMMER COTTAGES

The A-Frame type construction is becoming more popular in the building of summer homes on lake shores, mountain retreats and rural localities where medium priced homes are desired. The following schedules are based on 4 grades of construction: low, average, good, and excellent.

LOW GRADE

FOUNDATION:	Wood piers.
FLOOR:	Single over 2 x 6 floor joists.
ROOF:	Vertical boards & rolled roofing.
EXTERIOR:	Vertical boards or plywood.
INTERIOR:	Minimum finish.
LIGHTING:	Minimum quality fixtures & outlets.
PLUMBING:	None in base cost schedule.
HEATING:	None in base cost schedule.
BASEMENT:	None in base cost schedule.
INSULATION:	None in base cost schedule.

BASE COST SCHEDULE

Area in Sq. Ft.	Floors 1	1-1/4
200	$2.80	$3.05
300	2.45	2.65
400	2.15	2.35
500	2.05	2.25

NOTE: Use grade 1F-1 adjustment schedule to refine or adjust this Low Grade A-Frame.

AVERAGE GRADE

FOUNDATION:	Stone piers, concrete block or equivalent.
FLOORS:	Low grade plywood, 2 x 6 joists.
ROOF:	Fair sheathing, fair grade of cover.
EXTERIOR:	Fair sheathing, vertical siding or equivalent.
INTERIOR:	Plain finish and trim, few partitions.
PLUMBING:	Low cost toilet, lavatory and kitchen sink. Deduct $400 if none.
LIGHTING:	Low cost lighting and outlets.
HEATING:	None in base cost schedule.
BASEMENT:	None in base cost schedule. Use $1.75 per sq. ft. of basement area.
INSULATION:	None in base cost schedule.

BASE COST SCHEDULE

Area in Sq. Ft.	Floors 1	1-1/4	1-1/2
200	$7.35	$7.85	$8.70
300	5.55	6.00	6.70
400	5.10	5.50	6.10
500	4.70	5.10	5.70
600	4.45	4.85	5.45

NOTE: Use grade 1F-2 adjustment schedule to refine or adjust this Average Grade A-Frame.

PLUMBING

Lavatory	$100.
Toilet	125.
Bathtub	145.
Kitchen sink	100.
Hot water heater	75.

HEATING

Floor furnace	$125.
Forced air	450.
Electric wall heater	35 to 50.

A-FRAME SUMMER COTTAGE SPECIFICATIONS

GOOD GRADE

FOUNDATION:	6" concrete or 8" concrete block perimeter walls.
FLOORS:	Good flooring, subfloor on 2 x 8 joists.
ROOF:	Solid sheathing, good shingles, medium trusses and rafters.
EXTERIOR:	Wood framing, good sheathing and siding.
INTERIOR:	Good drywall or paneling, good trim.
PLUMBING:	Five standard fixtures; bathtub, toilets, lavatory, kitchen sink, and water heater. Deduct $960 if none.
LIGHTING:	Good fixtures and outlets.
HEATING:	None in base cost schedule.
BASEMENT:	None in base cost schedule. Use $2.65 per sq. ft. for basement area.
INSULATION:	Included in base cost schedule.

BASE COST SCHEDULE

Floors

Area in Sq. Ft.	1	1-1/4	1-1/2	1-3/4	2
300	10.75	11.45	12.55	12.90	13.30
400	8.95	9.60	10.65	10.90	11.30
600	8.10	8.75	9.65	9.95	10.25
800	7.45	8.00	8.90	9.20	9.45
1000	6.55	7.10	7.95	8.20	8.50
1200	6.15	6.70	7.55	7.75	8.00

HEATING

Sq. Ft. area	300	400	600	800	1000	1200
Floor furnace	.35	.35	.30	.30	.25	.25
Forced air	.65	.65	.60	.55	.50	.45
Recirculating hot water	1.15	1.15	1.15	1.10	1.10	1.00
Electric baseboard	.60	.55	.50	.45	.40	.40

PLUMBING

½ Bath	$285.
Lavatory	130.
Toilet	150.
Bathtub	190.
Kitchen sink	130.
Hot water heater	125.

NOTE: Use grade 1F-4 adjustment schedule to refine or adjust this Good Grade A- Frame.

A-FRAME SUMMER COTTAGE SPECIFICATIONS

EXCELLENT GRADE

FOUNDATION: 8" concrete perimeter walls and interior wall piers.
FLOORS: Good flooring and subfloors on 2 x 10 joists, bridged.
ROOF: 3/4" to 1" plywood sheathing and laminated rafters.
EXTERIOR: Wood framing, good sheathing and siding.
INTERIOR: Good, hardwood trim, paneling and cabinets.
PLUMBING: 5 good fixtures; bathtub, lavatory, toilet, kitchen sink, and water heater.
LIGHTING: Good fixtures and outlets.
HEATING: None in base cost schedule.
BASEMENT: None in base cost schedule. Use $2.65 per sq. ft. for basement area.
INSULATION: Included in base cost schedule.

BASE COST SCHEDULE

Floors

Area in Sq. Ft.	1	1-1/4	1-1/2	1-3/4	2
500	$10.70	$11.60	$12.85	$13.20	$13.70
700	9.70	10.25	11.50	11.85	12.25
900	8.95	9.70	10.95	11.35	11.70
1100	8.40	9.25	10.75	10.60	11.00
1300	7.85	8.70	9.70	10.10	10.45
1500	7.60	8.25	9.35	9.75	10.00

HEATING
(Apply to heated area of bldg.)

Sq. ft. area	500	700	900	1100	1300	1500
Floor furnace	.40	.35	.30	.25	.25	.25
Forced air	.75	.70	.65	.60	.55	.50
Recirculating hot water	1.25	1.25	1.20	1.20	1.15	1.15
Electric baseboard	.65	.60	.55	.50	.45	.40

Fireplace, including chimney --------$1185.
Second fireplace, same chimney ------ 265.

NOTE:
Use grade 1F-5 to adjust for variations from the above specifications under normal conditions; however, if the quality of construction found in any individual structure varies from grade 1F-5, adjust by using the grade most comparable to quality.

DUPLEX
GRADES

GRADE 2F-4

GRADE 2F-5

GRADE 2F-6

DUPLEX GRADE 2F-4

SPECIFICATIONS

FOUNDATION:	8" fair or good 6" concrete perimeter walls.
FLOOR:	Plywood sub-floor on 2" x 8" floor joists.
ROOF:	Medium pitch, frame, 3/4" sheathing, average wood or comp. shingles.
EXTERIOR:	Wood frame, sheathing, average siding and paint, or pumice block.
INTERIOR:	Plaster or drywall, average trim, average closets and storage.
PLUMBING:	Ten average quality fixtures; 2 toilets, 2 lavatories, 2 bathtubs, 2 kitchen sinks, 2 water heaters and laundry trays.
ELECTRICAL:	Average fixtures and outlets.
HEATING:	None in base cost schedule.
INSULATION:	Included in base cost schedule.

BASE COST SCHEDULE

Area in Sq. Ft.	Stories 1	2
1000	$13.60	$6.50
1100	13.30	6.40
1200	13.00	6.25
1300	12.75	6.15
1400	12.65	6.10
1500	12.60	6.05
1600	12.50	6.00
1700	12.40	5.95
1800	12.35	5.95
1900	12.25	5.90
2000	12.20	5.90

FLOOR ADJUSTMENTS

	Per sq. ft.
Hardwood, add	$0.25
Concrete slab, deduct	0.15

ROOF ADJUSTMENTS

	Per sq. ft.
Shakes, light, add	$0.35
Built-up, tar & gravel, add	0.10

EXTERIOR WALL VENEER

	Per sq. ft. of wall area
Face brick	$1.50
Roman brick	1.35
Used brick	1.25

All other adjustments are to be taken from the Residential 1F-4 schedule.

DUPLEX GRADE 2F-5

SPECIFICATIONS

FOUNDATION: 8" concrete perimeter walls.
FLOOR: Hardwood or equivalent, 1" sub-floor over 2" x 10" wood joists. Linoleum over plywood in kitchen and bath.
ROOF: Medium pitch, wood frame, 1" solid or plywood sheathing, vertical grain cedar shingle or equivalent.
EXTERIOR: Wood frame, wood sheathing, good cedar siding, painted, very little trim.
INTERIOR: Wood frame, plaster or equivalent walls and ceiling, painted or papered, good trim and cabinets. Ample closets. Ceiling and wall insulation.
PLUMBING: Ten good quality fixtures; 2 toilets, 2 lavatories, 2 bathtubs, 2 kitchen sinks, 2 water heaters, and laundry trays.
LIGHTING: Good fixtures and outlets.
HEATING: None in base cost schedule.

BASE COST SCHEDULE

Area in Sq. Ft.	Stories 1	2
1000	$15.10	$7.25
1100	14.75	7.10
1200	14.45	6.95
1300	14.15	6.85
1400	14.05	6.75
1500	14.00	6.70
1600	13.90	6.65
1700	13.80	6.65
1800	13.70	6.60
1900	13.60	6.55
2000	13.55	6.55
2400	13.50	6.50
3000	13.50	6.50

FLOOR ADJUSTMENTS

	Per sq. ft.
Softwood, double, deduct	$0.10
Concrete slab, deduct	0.25

ROOF ADJUSTMENTS

	Per sq. ft.
Shakes, light, add	$0.15
Shakes, heavy, add	0.30

EXTERIOR WALL VENEER

	Per sq. ft. of wall area
Face brick	$1.50
Roman brick	1.35
Used brick	1.25
Local stone	3.90

All other adjustments are to be taken from the Residential 1F-5 schedule.

DUPLEX GRADE 2F-6

SPECIFICATIONS

FOUNDATION:	8" concrete perimeter walls. Interior concrete piers.
FLOORS:	Hardwood or equivalent, 1" sub-floor over wood joists, softwood flooring in kitchen and bath, linoleum cover.
ROOF:	Medium pitch, wood frame, 1" solid plywood sheathing, vertical grain cedar shingle cover.
EXTERIOR:	Wood frame, wood sheathing, good cedar siding, painted.
INTERIOR:	Wood frame, plastered interior finish on walls and ceilings, painted, hardwood trim, hardwood plywood cabinets, ample closets. Ceiling and wall insulation.
PLUMBING:	Ten high quality fixtures consisting of; 2 toilets, 2 lavatorys, 2 bathtubs, 2 kitchen sinks, 2 water heaters, and laundry trays.
LIGHTING:	Very good fixtures, special outlets.
HEATING:	None in base cost schedule.

BASE COST SCHEDULE

Area in Sq. Ft.	Stories 1	2
1000	$16.75	$8.05
1100	16.40	7.90
1200	16.05	7.75
1300	15.70	7.60
1400	15.60	7.50
1500	15.55	7.45
1600	15.45	7.40
1700	15.35	7.40
1800	15.25	7.35
1900	15.15	7.30
2000	15.05	7.25
2400	15.00	7.25

FLOOR ADJUSTMENTS

	Per sq. ft.
Softwood, double, deduct	$0.12
Concrete slab, deduct	0.30

ROOF ADJUSTMENTS

	Per sq. ft.
Shakes, light, add	$0.12
Shakes, heavy, add	0.25

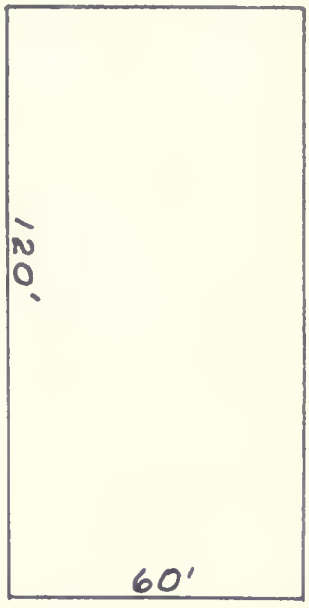
EXTERIOR WALL VENEER

	Per sq. ft. of wall area
Face brick	$1.50
Roman brick	1.35
Used brick	1.25
Local stone	3.90

All other adjustments are to be taken from the Residential 1F-6 schedule.

LOT VALUE COMPUTATIONS

RULE 1
RECTANGULAR LOTS



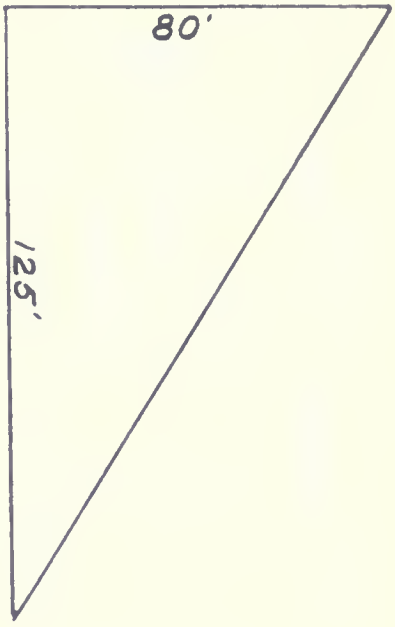
This is the most common shaped lot. The only variation being in the depth.
EXAMPLE: A lot 60' wide and 120' deep in a sub-division where the standard lot depth is 140'. The front foot val for a 140' deep lot has been established by comparison to be $50 per front foot.

The unit % is determined by using the 140' standard depth table. Read across from the 120 foot "depth in feet" column, the percentage is 93%. This lot is computed and listed as follows:

$50 x 93% = $46.50 per F.F. x 60' = $2,790

Frontage Figured	Average Depth	Unit Price	Unit %	Front Ft. Price	Total Value
60'	120'	$50	93%	$46.50	$2,790

RULE 2
TRIANGULAR LOT - BASE ON STREET



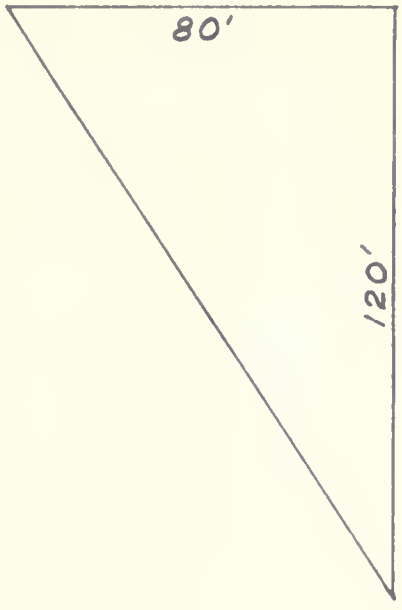
Triangle lots that base on the street are computed at 66% of the street frontage for the lot width. The depth is measured perpendicular from the base to the apex.
EXAMPLE: A triangle lot having a frontage of 80' and depth of 125' in an area where the standard depth is 150' and the front foot value is $60.

The unit % is determined by using the 150' standard depth table. Read across from the 124 foot "depth in feet" column, the percentage is 91%. This is computed and listed as follows:

80' x 66% = 52.8'
$60 x 91% = $54.60 x 52.8' = $2,882.88 - rounded to nearest $5 is $2,885.

Frontage Figured	Average Depth	Unit Price	Unit %	Front Ft. Price	Total Value
52.8'	125'	$60	91%	$54.60	$2,885

RULE 3
TRIANGULAR LOT - APEX ON THE STREET



Triangle lots having the apex on the street are computed at 34% of the base or rear width.
EXAMPLE: A triangle lot with the apex on the street having a base of 80' and 120' depth, on a street where the standard depth is 150' and the front foot value has been established by comparison at $60 per front foot.

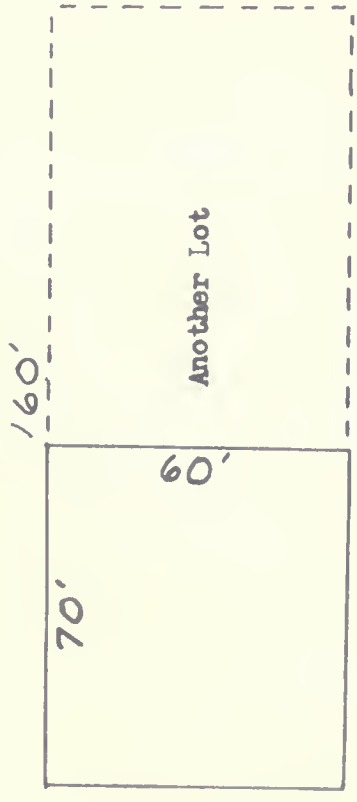
The unit % is determined by using the 150' standard depth table. Read across from the 120 foot "depth in feet" column, the percentage is 89%. The lot is computed and listed as follows:

80' x 34% = 27.2'
$60 x 89% = $53.40 x 27.2' = $1452 - rounded to nearest $5 is $1450.

Frontage Figured	Average Depth	Unit Price	Unit %	Front Ft. Price	Total Value
27.2'	120'	$60	89%	$53.40	$1450

STREET

RULE 4
BACK LOT



Lots that do not have a street frontage are termed back lots.
EXAMPLE: A lot 60' wide and 160' deep in a standard depth area of 140'. The rear 70' has been deeded to separate ownership. The front foot value has been established by comparison to be $45 per front foot.

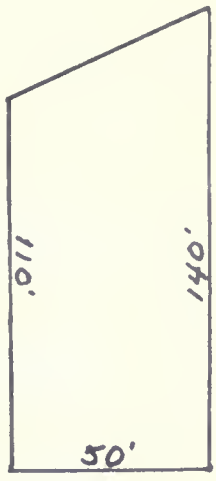
Using the 140' standard depth table on page 86 determine the percentage for the total 160' depth. This percentage is 107%. Subtract the depth percentage for the front 90' which is 80%. The remainder is the percentage to be applied to the front foot value of the rear lot. Compute and list as follows:

107% - 80% = 27%
$45 x 27% = $12.15 x 60' = $729, rounded to the nearest $5 is $730. "R" denotes rear lot.

Frontage Figured	Average Depth	Unit Price	Unit %	Front Ft. Price	Total Value
60' R	70'	$45	27%	$12.15	$730

LOTS WITH PARALLEL SIDES OF UNEQUAL LENGTH

This lot has side lines at right angles to the street but with unequal depth.
EXAMPLE: A lot with a 50' front and unequal sides of 140' and 110', in an area where the standard depth is 140' and the front foot price is $60 per foot.



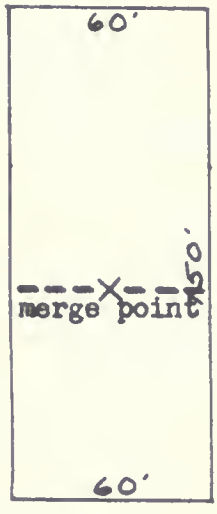
This lot is computed and listed as follows:

110' + 140' = 250' ÷ 2 = 125' average depth - apply RULE 1.

Frontage Figured	Average Depth	Unit Price	Unit %	Front Ft. Price	Total Value
50'	125'	$60	94%	$56.40	$2,820

MERGED LOTS

Lots that extend from one street to another and have a higher value on one street than the other must be merged in a ratio influence to value. To find the merge point add the two values together and divide into the total depth.
EXAMPLE: A lot 150' deep, 60' wide, fronting on two street of different values. By comparison one street is valued at $40 per front foot and the other is $30 per front foot. Standard lot depth in this area is 140'.

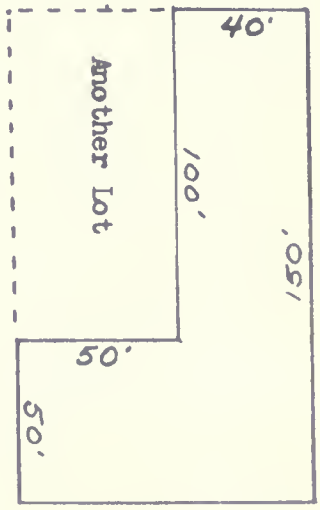


$40 + $30 = $70
150' ÷ $70 = 2.14
$40 x 2.14 = 86' - apply RULE 1.
$30 x 2.14 = 64' - apply RULE 1.

Frontage Figured	Average Depth	Unit Price	Unit %	Front Ft. Price	Total Value
60'	86'	$40	78%	$31.20	$1870
60'	64'	30	68%	20.40	1225

L SHAPED AND BACK LOT

An "L" shaped lot having a portion as a back lot is computed and listed as follows:
EXAMPLE: A lot having a depth of 150' with a 40' street frontage with a 50' "L" protruding behind another lot in an area 140' standard depth and a $60 front foot value.



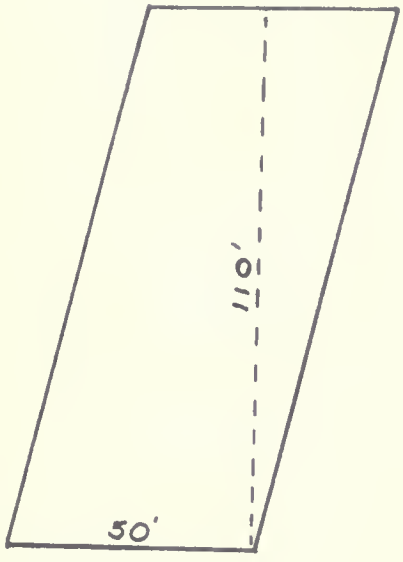
Use two lines - apply RULES 1 and 4.

Frontage Figured	Average Depth	Unit Price	Unit %	Front Ft. Price	Total Value
40'	150'	$60	104%	$62.40	$2495
50' R	50'	60	19%	11.40	570

PARALLELOGRAM LOTS

Measure this type lot at a right angle to the street rather than following the lot line. Use this depth measurement for the corrective factor from the depth table.

EXAMPLE: A lot with 50' front and 110' depth in an area where the standard depth lot is 140' and the front foot value has been established by comparison at $40 per front foot. This lot is computed and listed as follows:



STREET

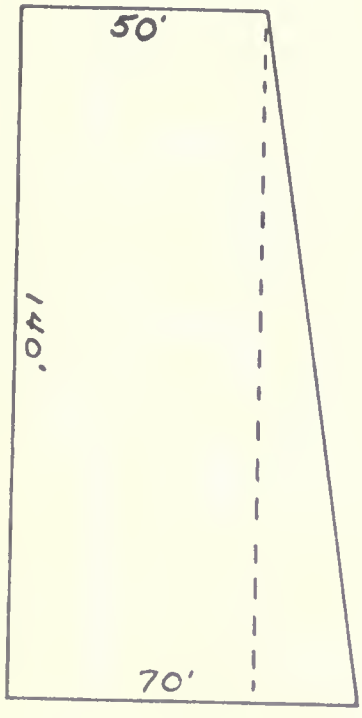
Apply RULE 1.

Frontage Figured	Average Depth	Unit Price	Unit %	Front Ft. Price	Total Value
50'	110'	$40	89%	$35.60	$1,780

TRAPEZOIDAL LOT

A lot with parallel front and rear lines of unequal length is computed and listed as follows:

EXAMPLE: A lot 140' deep, 50' front and 70' rear in an area where the front foot value is $40 and the standard depth is 140'.



Use two lines - apply RULES 1 and 3.

Frontage Figured	Average Depth	Unit Price	Unit %	Front Ft. Price	Total Value
50'	140'	$40	100%	$40	$2000
7'	140'	40	100%	40	280

Same lot but with longest parallel line on the street apply RULES 1 and 2.

LOT DEPTH VALUATION CALCULATIONS

The tables on pages 83 to 86 are to be used as guides for calculating values for lots that are either shorter or longer than the standard lot depth in the area.

Standard lot depths are shown across the top of the tables above the solid line. The left hand column shows various actual depths that may exist.

Select the actual depth and follow across to the proper standard lot depth for the area being appraised. The figure encountered is the percentage factor to be applied to the front foot value of the lot. The modified front foot value is then multiplied by the width of the lot.

LOT DEPTH VALUATION FACTORS

Depth in Feet	100'	110'	115'	120'	125'	130'
10	32	30	29	29	28	28
12	35	33	32	32	31	30
14	37	36	35	34	34	33
16	40	38	37	37	36	35
18	42	40	40	39	38	37
20	45	43	42	41	40	39
22	47	45	44	43	42	41
24	49	47	46	45	44	43
26	51	49	48	47	46	45
28	53	50	49	48	47	46
30	55	52	51	50	49	48
32	57	54	53	52	51	50
34	58	56	54	53	52	51
36	60	57	56	55	54	53
38	62	59	58	56	55	54
40	63	60	59	58	57	55
42	65	62	60	59	58	57
44	66	63	62	61	59	58
46	68	65	63	62	61	59
48	69	66	65	63	62	61
50	71	67	66	65	63	62
52	72	69	67	66	65	63
54	73	70	69	67	66	64
56	75	71	70	68	67	66
58	76	73	71	70	68	67
60	77	74	72	71	69	68
62	79	75	73	72	70	69
64	80	76	75	73	72	70
66	81	77	76	74	73	71
68	82	79	77	75	74	72
70	84	80	78	76	75	73
72	85	81	79	77	76	74
74	86	82	80	79	77	75
76	87	83	81	80	78	76
78	88	84	82	81	79	77
80	89	85	83	82	80	78
82	91	86	84	83	81	79
84	92	87	85	84	82	80
86	93	88	87	85	83	81
88	94	89	88	86	84	82
90	95	90	88	87	85	83
92	96	91	89	88	86	84
94	97	92	90	89	87	85
96	98	93	91	89	88	86
98	99	94	92	90	89	87
100	100	95	93	91	89	88
102	101	96	94	92	90	89
104	102	97	95	93	91	89
106	103	98	96	94	92	90
108	104	99	97	95	93	91

LOT DEPTH VALUATION FACTORS (Cont.)

Depth in Feet	100'	110'	115'	120'	125'	130'
110	105	100	98	96	94	92
112	106	101	99	97	95	93
114	107	102	100	98	96	94
116	108	103	100	98	96	94
118	109	104	101	99	97	95
120	110	104	102	100	98	96
122	111	105	103	101	99	97
124	111	106	104	102	100	98
126	112	107	105	102	100	98
128	113	108	106	103	101	99
130	114	109	106	104	102	100
132	115	110	107	105	103	101
134	116	110	108	106	104	102
136	117	111	109	107	104	102
138	118	112	110	107	105	103
140	118	113	110	108	106	104
142	119	114	111	109	107	105
144	120	114	112	110	107	105
146	121	115	113	110	108	106
148	122	116	114	111	109	107
150	123	117	114	112	110	107
152	123	118	115	113	110	108
154	124	118	116	113	111	109
156	125	119	117	114	112	110
158	126	120	117	115	112	110
160	127	121	118	116	113	111
162	127	121	119	116	114	112
164	128	122	119	117	115	112
166	129	123	120	118	115	113
168	130	124	121	118	116	114
170	130	124	122	119	117	114
172	131	125	122	120	117	115
174	132	126	123	120	118	116
176	133	127	124	121	119	116
178	133	127	124	122	119	117
180	134	128	125	123	120	118
182	135	129	126	123	121	118
184	136	129	126	124	121	119
186	136	130	127	125	122	120
188	137	131	128	125	123	120
190	138	131	129	126	123	121
192	139	132	129	127	124	122
194	139	133	130	127	125	122
196	140	133	131	128	125	123
198	141	134	131	128	126	123
200	141	135	132	129	126	124

LOT DEPTH VALUATION FACTORS

Depth in Feet	135'	140'	145'	150'	155'	160'
10	27	27	26	26	25	25
12	30	29	29	28	28	27
14	32	32	31	31	30	30
16	34	34	33	33	32	32
18	37	36	35	35	34	34
20	39	38	37	37	36	35
22	40	40	39	38	38	37
24	42	41	41	40	39	39
26	44	43	42	42	41	40
28	46	45	44	43	43	42
30	47	46	45	45	44	43
32	49	48	47	46	45	45
34	50	49	48	48	47	46
36	52	51	50	49	48	47
38	53	52	51	50	50	49
40	54	53	53	52	51	50
42	56	55	54	53	52	51
44	57	56	55	54	53	52
46	58	57	56	55	54	54
48	60	59	58	57	56	55
50	61	60	59	58	56	56
52	62	61	60	59	58	57
54	63	62	61	60	59	58
56	64	63	62	61	60	59
58	66	64	63	62	61	60
60	67	65	64	63	62	61
62	68	67	65	64	63	62
64	69	68	66	65	64	63
66	70	69	67	66	65	64
68	71	70	68	67	66	65
70	72	71	69	68	67	66
72	73	72	70	69	68	67
74	74	73	71	70	69	68
76	75	74	72	71	70	69
78	76	75	73	72	71	70
80	77	76	74	73	72	71
82	78	77	75	74	73	72
84	79	77	76	75	74	72
86	80	78	77	76	74	73
88	81	79	78	77	75	74
90	82	80	79	77	76	75
92	83	81	80	78	77	76
94	83	82	81	79	78	77
96	84	83	81	80	79	77
98	85	84	82	81	80	78
100	86	85	83	82	80	79
102	87	85	84	82	81	80
104	88	86	85	83	82	81
106	89	87	86	84	83	81
108	89	88	86	85	83	82

LOT DEPTH VALUATION FACTORS (Cont.)

Depth in Feet	135'	140'	145'	150'	155'	160'
110	90	89	87	86	84	83
112	91	89	88	86	85	84
114	92	90	89	87	86	84
116	93	91	89	88	87	85
118	93	92	90	89	87	86
120	94	93	91	89	88	87
122	95	93	92	90	89	87
124	96	94	93	91	89	88
126	97	95	93	92	90	89
128	97	96	94	92	91	89
130	98	96	95	93	92	90
132	99	97	95	94	92	91
134	100	98	96	95	93	92
136	100	99	97	95	94	92
138	101	99	98	96	94	93
140	102	100	98	97	95	94
142	103	101	99	97	96	94
144	103	101	100	98	96	95
146	104	102	100	99	97	95
148	105	103	101	99	98	96
150	105	104	102	100	98	97
152	106	104	102	101	99	97
154	107	105	103	101	100	98
156	107	106	104	102	100	99
158	108	106	104	103	101	99
160	109	107	105	103	102	100
162	110	108	106	104	102	101
164	110	108	106	105	103	101
166	111	109	107	105	103	102
168	112	110	108	106	104	102
170	112	110	108	106	105	103
172	113	111	109	107	105	104
174	114	111	110	108	106	104
176	114	112	110	108	107	105
178	115	113	111	109	107	105
180	115	113	111	110	108	106
182	116	114	112	110	108	107
184	117	115	113	111	109	107
186	117	115	113	111	110	108
188	118	116	114	112	110	108
190	119	116	114	112	111	109
192	119	117	115	113	111	110
194	120	118	116	114	112	110
196	120	118	116	114	112	111
198	121	119	117	115	113	111
200	122	120	117	115	114	112

THE APPRAISAL OF FARM BUILDINGS

In appraising farm buildings, the appraiser should attempt to arrive at the value their presence adds to the value of the farm. The degree of usefulness of the buildings should help to establish their value.

Farm out buildings are priced on a square foot basis predicated on the theory that the larger the area the less per square foot the building will cost. Condition should not be confused with quality. Estimates of replacement costs should be made as though the buildings were reproduced with new materials and good workmanship.

Specifications and cost data for several types of farm buildings are presented in the following pages. Barns, various types of sheds, feeding facilities, hog houses, and silos are found on many ranches in Montana and it is hoped that the appraised value will be more equitable among the several counties and between the various types of buildings through the use of this manual. Selection of the grade is accomplished through inspection of the subject building and comparing its structural features with those found in the manual. Adjustments can be made to compensate for variations from standard basic costs.

Inferior material and labor, used material, and buildings of poor quality can be brought into the right cost bracket through the use of the lower grade price in each type of building.

The following points should be kept in mind as a guide to the proper grade or quality key:

Low-Cost - recognized by poor design, unplanned, low grade materials and labor.

Average - moderate cost structure, minimum of planning, average or less quality of material. This type of farm building is found throughout the

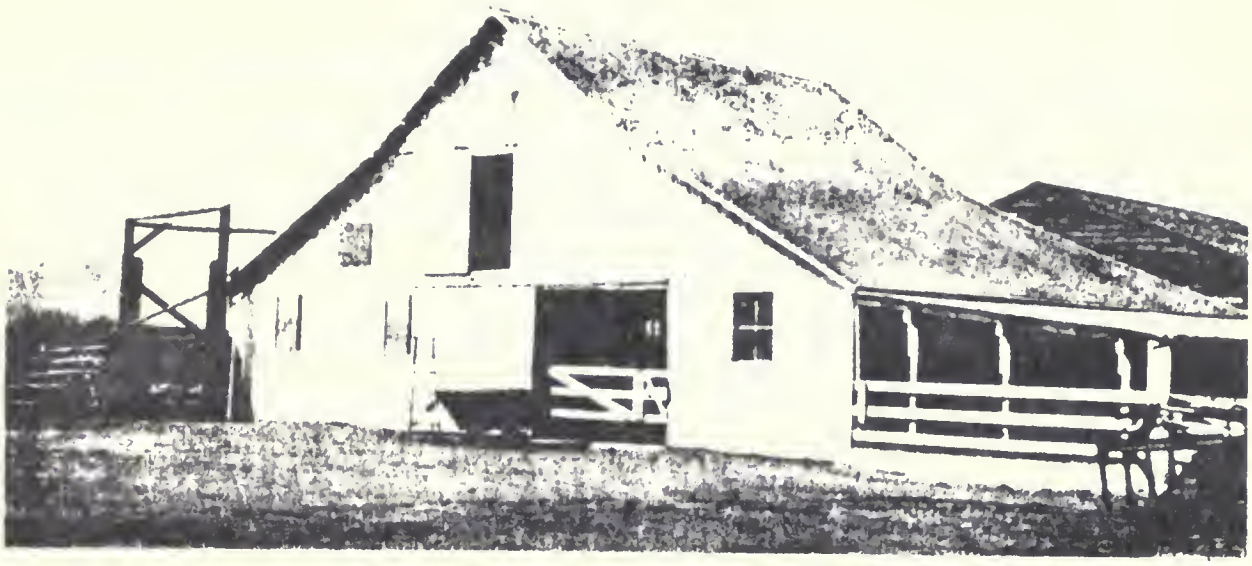
state.

Good - good structural design, usually contractor built with good materials.

The quality key should be used when the subject is either greater or less than the standard for the grade chosen. The percentage of quality can vary from 5% to 25%, greater or less, than standard.

Buildings depreciate because they wear out physically. They also depreciate by going out of style or they lose their utility and therefore become less valuable.

In arriving at an estimated sound value for farm buildings the appraiser is required to determine a basic depreciation factor representing the combined effect of both physical and functional depreciation. Obviously, consideration must be given to whether or not the specific building is ideally suited to or is even essential to the operation of the farm on which it is located. In some instances buildings are super-adequate. They reflect a cost far exceeding the actual need of the farm operation. This is very true of some barns which were built to care for draft animals of a bygone era. The use of good judgement will result in realistic appraisals.



BARN
LOW COST CONSTRUCTION

FOUNDATION: Mud sills.
WALLS: Board and batten siding on wood studs; pine doors and windows.
FLOORS: None
ROOF: Gambrel or gable type, asphalt shingles, wood decking, wood rafters and framing.
OTHER FEATURES: Stalls and bins. Minimum electric lighting.

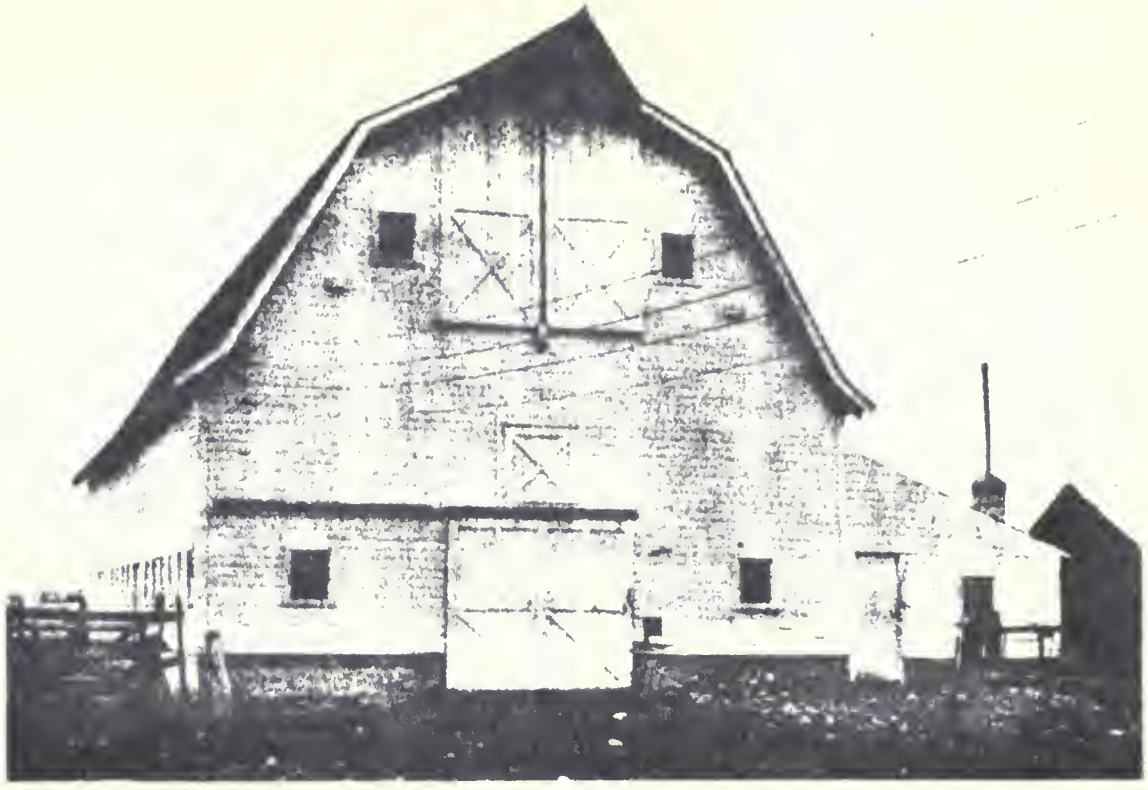
AREA	PRICE PER S.F.	AREA	PRICE PER S.F.
600	$2.50	4500	$1.55
800	2.30	5000	1.55
1000	2.15	5500	1.50
1500	2.00	6000	1.50
2000	1.90	7000	1.45
2500	1.80	8000	1.40
3000	1.75	9000	1.40
3500	1.70	10000	1.35
4000	1.65		

ADJUSTMENTS

LOFT: Add $1.15 for area of loft.

FLOORS: Add $0.50 per sq. ft. of floor area for concrete.

Further refinement to this grade of construction can be accomplished by using a quality factor of plus or minus 5% to 25%.



BARN
AVERAGE CONSTRUCTION COST

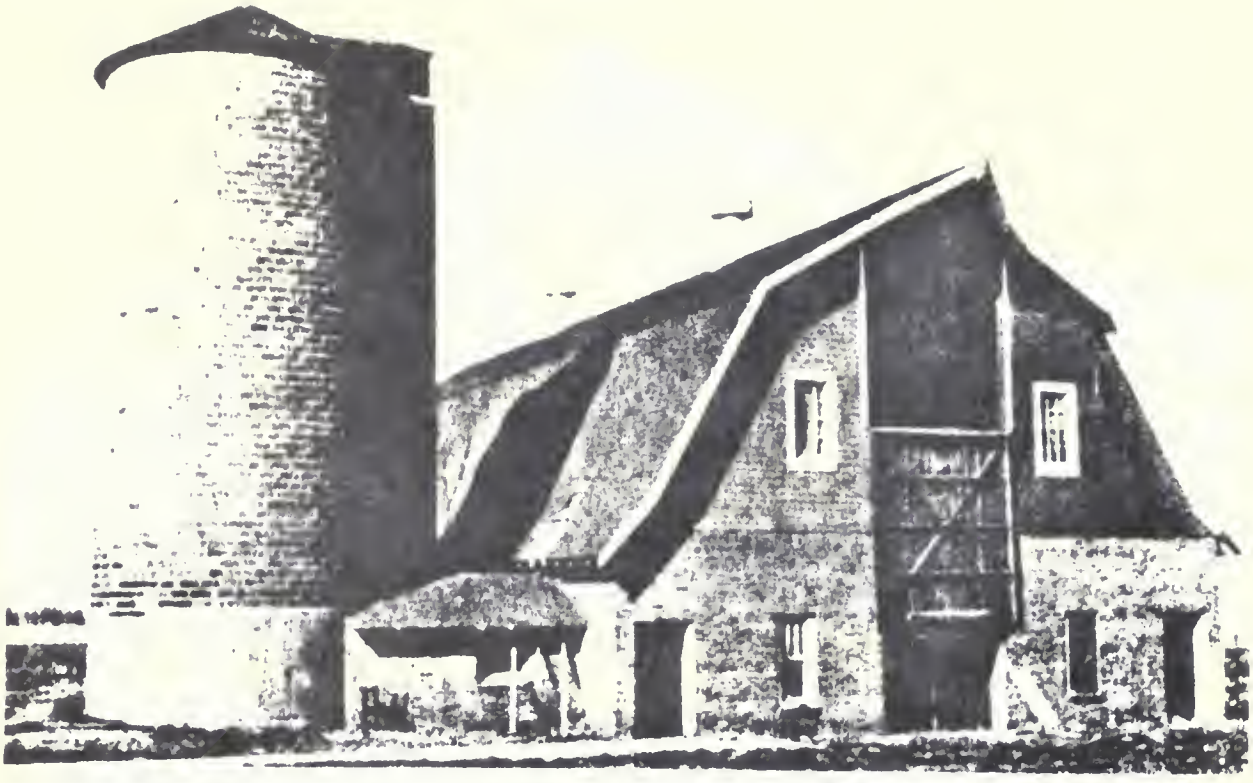
FOUNDATION: Concrete or stone walls.
WALLS: Wood frame, single siding, paint.
FLOORS: None.
ROOF: Gambrel or gable. Wood frame, shingles, aluminum, or steel.
OTHER FEATURES: Electric lighting. Stalls and drives.

AREA	PRICE PER S. F.	AREA	PRICE PER S. F.
600	$4.20	4500	$2.90
800	4.00	5000	2.80
1000	3.90	5500	2.75
1500	3.75	6000	2.75
2000	3.55	7000	2.70
2500	3.45	8000	2.70
3000	3.25	9000	2.65
3500	3.05	10000	2.65
4000	2.95		

ADJUSTMENTS

LOFT: Add $1.25 per square foot of loft area.
FLOOR: Add $0.50 per square foot for concrete; add $0.65 per sq. ft. for plank.

Further refinement to this grade of construction can be accomplished by using a quality factor of plus or minus 5% to 25%.



BARN
GOOD CONSTRUCTION

FOUNDATION:	Concrete walls and footings.
WALLS:	Concrete block or wood frame, sheathing, siding, paint.
FLOORS:	Wood plank or concrete.
ROOF:	Gambrel type, wood or steel frame, clear span, asphalt shingles, aluminum, or steel cover.
MECHANICAL FEATURES:	Electric lighting. Water piping and hose bibs.
OTHER FEATURES:	Grain bin, good partitions.

AREA	PRICE PER S. F.	AREA	PRICE PER S. F.
600	$7.40	4500	$4.70
800	6.65	5000	4.55
1000	6.25	5500	4.50
1500	5.95	6000	4.45
2000	5.70	7000	4.40
2500	5.50	8000	4.30
3000	5.30	9000	4.25
3500	5.05	10000	4.20
4000	4.90		

ADJUSTMENTS

LOFT: Add $1.35 per square foot of loft area.

Further refinement to this grade of construction can be accomplished by using a quality factor of plus or minus 5% to 25%.

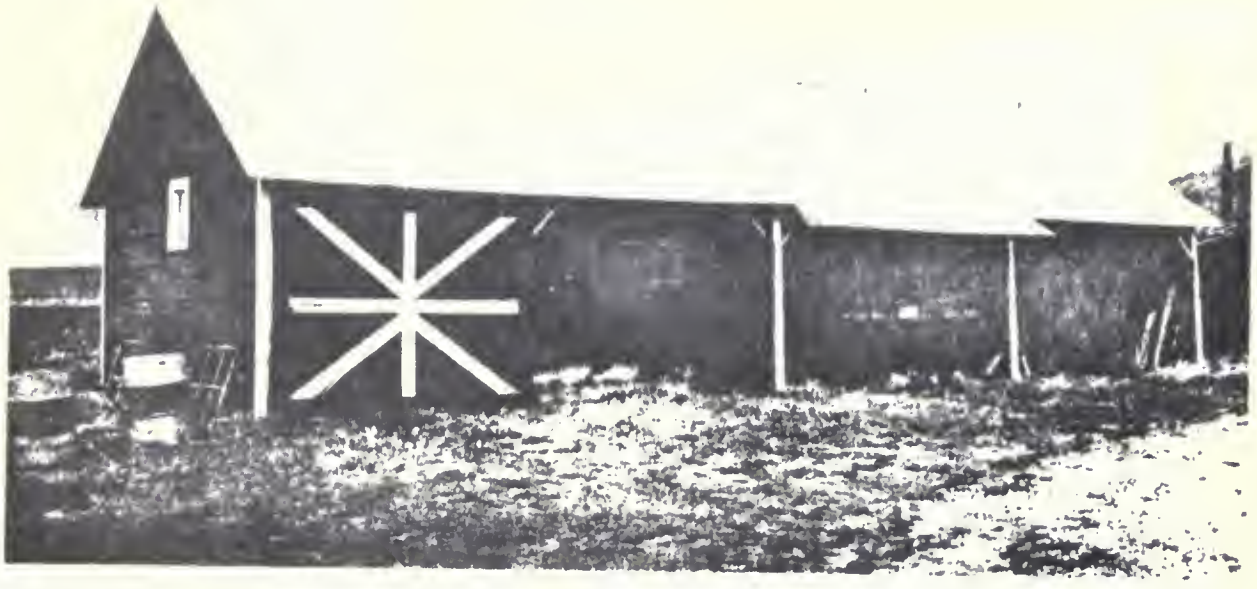
OPEN FRONT SHED

Livestock & Implement

FOUNDATION:	Post in ground.
WALLS:	Board and batten or equivalent - three sides.
FLOOR:	None.
ROOF:	Shed type, add 5% for gable.
OTHER FEATURES:	Add $0.05 per square foot for minimum 110 volt electrical service.

AREA	LOW	AVERAGE	GOOD
500	$1.75	$2.00	$2.30
1000	1.60	1.85	2.10
2000	1.50	1.70	1.95
3000	1.40	1.60	1.85
4000	1.35	1.55	1.80

Further refinement to this grade of construction can be accomplished by using a quality factor of plus or minus 5% to 10%.



LOW COST
IMPLEMENT SHED
POLE CONSTRUCTION

FOUNDATION:	Piers.
WALLS:	Corrugated metal on wood girts and timber poles.
FLOOR:	None. (Add $0.45 per sq. ft. for concrete slab.)
ROOF:	Double pitch, corrugated metal on wood slats and wood rafters.
OTHER FEATURES:	None. (Add $0.10 to $0.15 per sq. ft. for electric lighting.)

AREA	PRICE PER S. F.	AREA	PRICE PER S. F.
1000	$2.50	3000	$2.15
1500	2.40	3500	2.05
2000	2.25	4000	2.00
2500	2.20	5000	1.95

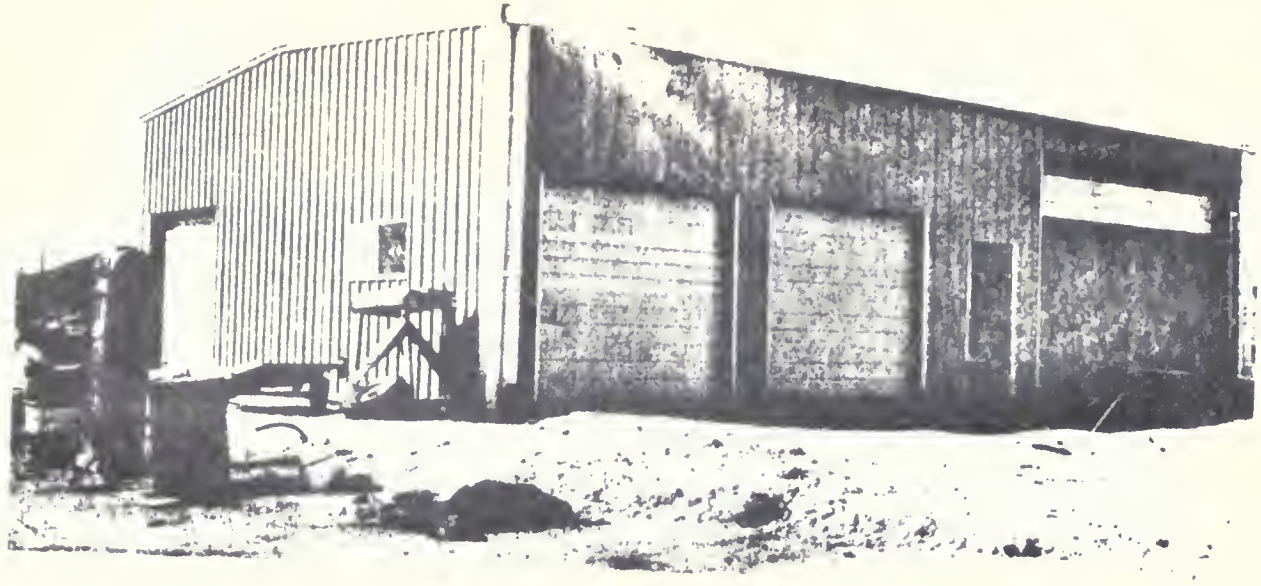
Further refinement to this grade of construction can be accomplished by using a quality factor of plus or minus 5% to 10%.

AVERAGE
IMPLEMENT SHED

FOUNDATION:	Concrete or stone piers.
WALLS:	Good wood frame, metal or wood siding, painted.
FLOORS:	Concrete. (Deduct $0.50 per sq. ft. for no floor.)
ROOF:	Average shed or gable, metal covering.
MECHANICAL FEATURES:	Electric lighting. (Deduct $0.15 to $0.30 per sq. ft. for no electricity.)

AREA	PRICE PER S. F.	AREA	PRICE PER S. F.
1000	$3.15	3000	$2.65
1500	2.90	3500	2.55
2000	2.75	4000	2.50
2500	2.70	5000	2.45

Further refinement to this grade of construction can be accomplished by using a quality factor of plus or minus 5% to 10%.



GOOD
IMPLEMENT SHED

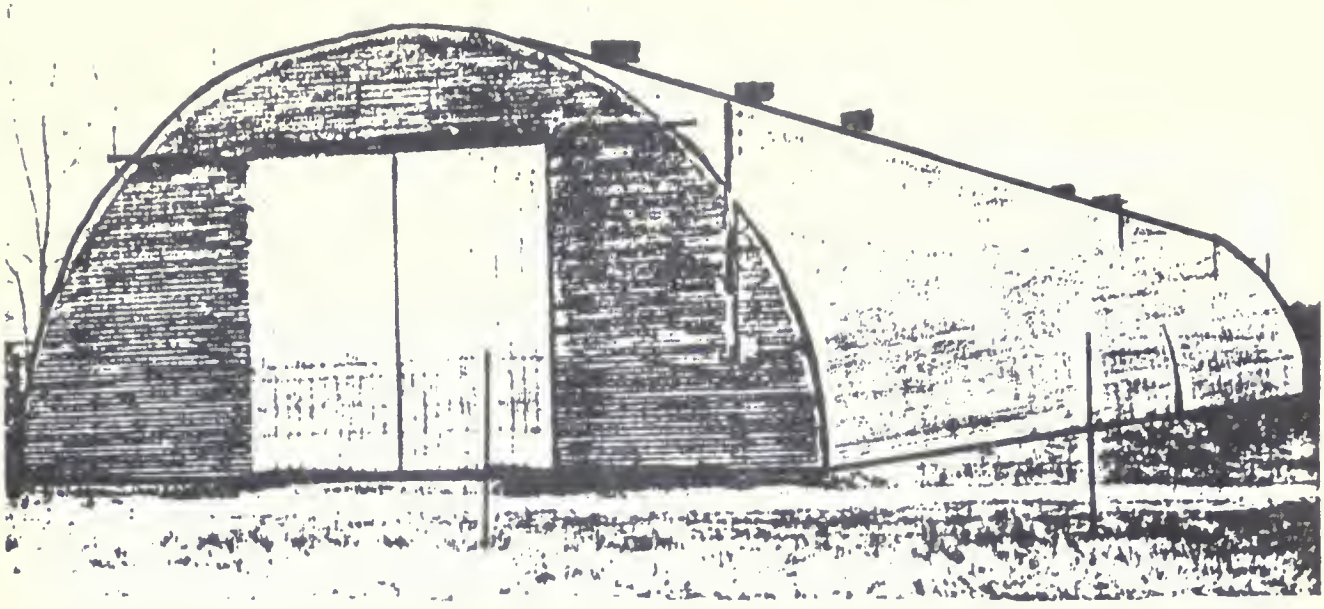
FOUNDATION: Concrete walls and footings.
WALLS: Steel or wood frame, metal siding, concrete block, or good wood sheathing and siding painted.
FLOORS: First, concrete; loft, pine on wood joists. (Deduct $0.60 for no concrete floor.)
ROOF: Steel or wood frame, metal cover.
OTHER FEATURES: Electric lighting, 220 volt service.

AREA	PRICE PER S. F.	AREA	PRICE PER S. F.
1000	$3.75	3000	$3.15
1500	3.45	3500	3.05
2000	3.30	4000	3.00
2500	3.25	4500	2.95

ADJUSTMENTS

HEATING: Add $0.25 per square foot of heated area.
INTERIOR PARTITIONS: Add $0.75 per square foot of partition.

Further refinement to this grade of construction can be accomplished by using a quality factor of plus or minus 5% to 10%.



QUONSET TYPE BUILDINGS

FOUNDATION = Concrete Perimeter Foundation

FLOOR = No Floor

EXTERIOR = Corrugated Metal: Steel Frame, Rigid Frame, or Good Wood Laminated Frame.

COST PER SQUARE FOOT

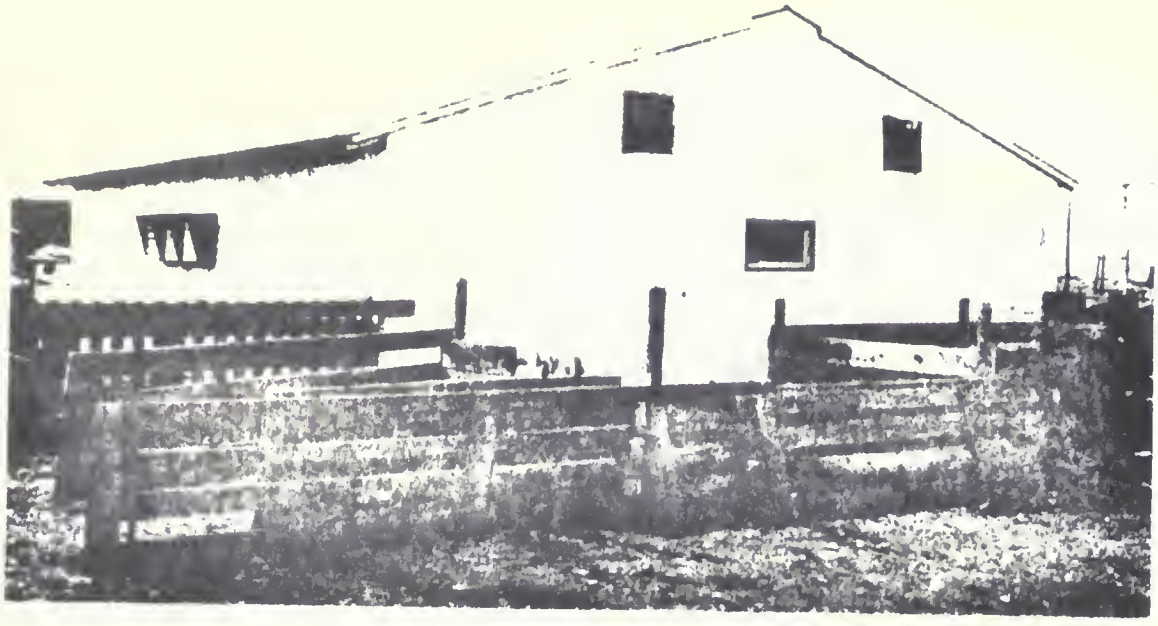
LENGTH	WIDTH		
	20 Ft.	40 Ft.	60 Ft.
24	2.75	-	-
40	2.50	3.00	-
60	2.40	2.80	3.45
80	2.35	2.70	3.25
100	2.25	2.60	3.05

ADJUSTMENTS

Conc. Floor	Add	.60 Per Sq.Ft.
Electricity	Add	.25 Per Sq.Ft.
Lining	Add	.40 Per Sq.Ft.

QUALITY KEY

Light Construction	Minus	10% to 20%
Medium Construction	Base	
Heavy Construction	Plus	10% to 20%



SWINE FARROWING BARN

FOUNDATION: Concrete wall and footers.
WALLS: Concrete block.
FLOORS: Concrete, slatted floors are additional.
ROOF: Double pitch, asphalt shingles.
CEILING: Insulated and plywood finish.
OTHER FEATURES: Electric lighting.

BASE BUILDING COST Cost per square foot of ground area.

ground floor area						
750	1000	1500	2000	3000	4000	5000
$4.65	4.30	4.00	3.85	3.70	3.55	3.50

TYPICAL FARROWING EQUIPMENT

	Cost per sq. ft. floor area
Wood farrowing pens and ventilation	$2.00
Steel farrowing pens and ventilation	3.75

MODIFICATIONS Cost per sq. ft. ground floor area

Metal roof	+ $0.15
Roll roof	- 0.06
Wood shingle roof	+ 0.18
Supplemental heat	+ 0.25
Full slatted floor and pit	+ 1.25
25% slatted floor and pit	+ 0.60
Frame insulated wall	- 0.20
Frame wall, no insulation	- 0.75

LIQUID MANURE TANKS Rectangular - 10' deep and 20' wide.

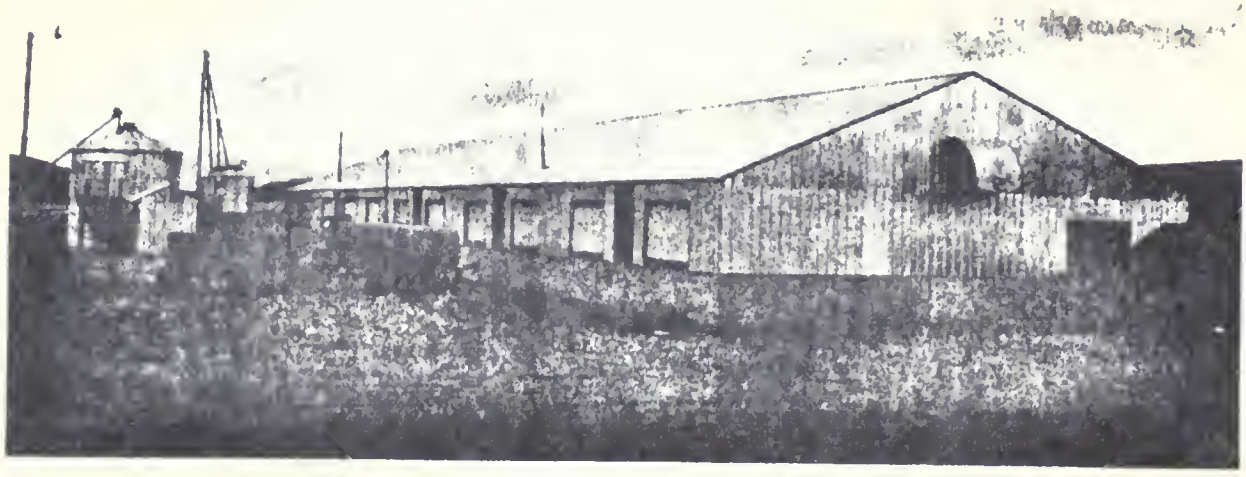
Length	Gal. Cap.	Cost
40'	60,000	$4500
80'	120,000	8500

FARROWING EQUIPMENT

	each
Steel farrowing stalls	$185
Steel farrowing pens	175
Wood farrowing pens	50
Ventilation fan	175
Concrete block pens	75
Automatic waterer & pipe	25

OUTSIDE IMPROVEMENTS

Concrete exercise apron $0.50 S. F.
Wood fencing per lin. ft. $1.25
Steel panel fence per lin. ft. $6.00



SWINE FINISHING BARN OR SHELTER

FOUNDATION: Concrete perimeter.
WALLS: Metal or wood, pole framing.
FLOOR: Concrete, slatting is an additional cost.
ROOF: Metal.
MISC.: Electricity.

BASE BUILDING: Cost per square foot of ground floor area

BLDG. A

Ground floor area	1000	2000	3000	4000	5000	6000	7000	10000
	$3.15	2.55	2.35	2.25	2.20	2.15	2.15	2.10

ADJUSTMENTS

	Cost per sq. ft.
Asphalt shingle roof	-$0.08
Roll roofing	- .15
Full slatted floor	+ 1.25
25% slatted floor & pit	+ .60
Masonry fd. with frame wall	+ .25

TYPICAL FEEDING EQUIPMENT

	Cost as shown
Wood pens, per lin. ft.	$3.00
Steel pens, per lin. ft.	10.00
Masonry pens, per lin. ft.	3.45
Automatic heated waterer	85.00
Automatic unheated waterer	55.00
Automatic overhead feeder/ft.	35.00

METAL FEED STORAGE TANK AND DELIVERY AUGER

Diameter	Height	Ton Capacity	Cost Each
6'	15'	4	$575
6'	20'	6.5	625
6'	25'	10	700
8'	23'	14	1300
8'	29'	21	1380
8'	34'	28	1550

CIRCULAR LIQUID MANURE TANKS

Diameter	Gal. Cap.	Cost
32'	60,000	$4000
48'	135,000	8500

GOOD GRADE

POLE BARNS AND ARENAS

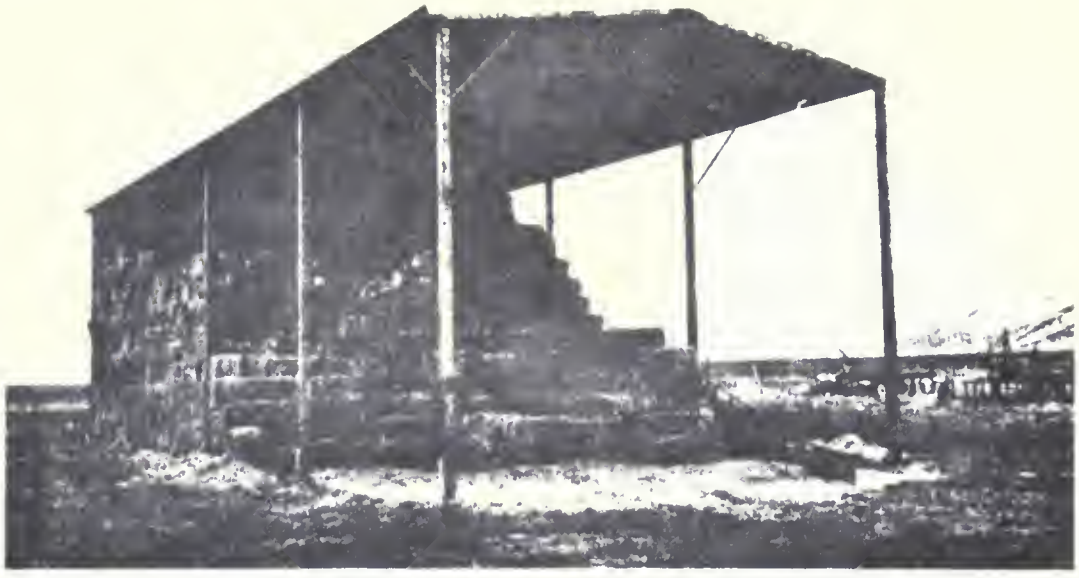
	LOW	AVERAGE	GOOD
FOUNDATION:	None	None	None
FLOORS:	None	None	None
ROOF:	2"x6" rafters, 1"x4" purlins & gal. iron cover.	2"x6" rafters, 2"x4" purlins & metal cover.	2"x8" rafters, 6" purlins, braces, metal cover.
WALLS:	Untreated poles 6" to 8" dia. with 4"x6" beams. Metal clad 3 sides.	Treated poles 6" to 8" dia., 6"x6" beams. Metal clad 3 sides.	Treated poles 6" to 10" dia., 6"x8" beams. Metal clad.

AREA	LOW	AVERAGE	GOOD
600	$1.30	$1.55	$1.75
1000	1.25	1.50	1.65
1500	1.20	1.40	1.55
2000	1.15	1.30	1.45
3000	1.10	1.20	1.35
5000	1.05	1.15	1.25
7500	1.00	1.05	1.20
10000	.95	1.00	1.10
15000	.90	.95	1.05
25000	.80	.85	1.00

ADJUSTMENTS

FLOORS: Concrete - add $0.30 to $0.50 per square foot.
VENTS: Stationary $35 to $75 each. Rotary, $100 to $140 each.

Further refinement to these grades of construction can be accomplished by using a quality factor of plus or minus 5% to 10%.



(LOW GRADE HAY SHED)

FEEDING AND HAY SHED

	LOW	AVERAGE	GOOD
FOUNDATION:	Mud sills.	Piers.	Concrete.
FLOORS:	None.	Concrete aprons.	Concrete aprons.
ROOF:	Wood frame, low pitch with metal cover.	Wood frame, light trusses & metal cover.	Wood frame, good trusses & purlins, metal cover.
WALL:	Minimum, light frame, no siding.	Average frame, no siding.	Wood frame, partially sided.
ELECTRICAL:	None.	None.	None.

PRICE PER SQUARE FOOT

AREA	LOW	AVERAGE	GOOD
1000	$0.80	$0.95	$1.25
2000	0.75	0.85	1.15
3000	0.65	0.75	1.05
5000	0.60	0.70	.95
7000	0.55	0.65	.90
9000	0.50	0.60	.80
11000	0.50	0.60	.75

Further refinements to these grades of construction can be accomplished by using a quality factor of plus or minus 5% to 10%.

PORCELAIN SILO

TYPE - Harvestore silo, porcelain steel.

DIAMETER	HEIGHT	COST
14'	40'	$10100
14'	50'	12600
17'	40'	12240
17'	50'	15300
20'	27'	9720
20'	30'	10800
20'	40'	14400
20'	50'	18000
20'	60'	21600
25'	65'	29250
25'	80'	36000

The above prices include foundation, erection, and automatic unloader.

Deduct for no unloader:

14'	$2500
17'	3100
20'	3700
24'	4600

CONCRETE STAVE SILO

Price includes chute, foundation, and erection.

DIAMETER	HEIGHT	COST
10'	30'	$ 1645
10'	40'	2300
10'	50'	3100
12'	30'	1780
12'	40'	2360
12'	50'	3100
14'	40'	2760
14'	50'	3450
16'	30'	2415
16'	40'	2760
16'	50'	3800
16'	60'	4600
18'	50'	4485
18'	60'	5300
20'	40'	4140
20'	50'	5060
20'	60'	6095
20'	70'	7245
24'	40'	6095
24'	50'	7245
24'	60'	8510
24'	70'	10120

"A"

"B"

POTATO STORAGE BUILDINGS

BUILDING A

The typical below ground storage has a dirt floor, post supported A-frame structure covered with baled or loose straw and dirt. Ventilation is supplied by wood air ducts.

BUILDING B

The typical above ground storage building has concrete floor, masonry insulated wall, air ducts in floor and wall, insulated walls and ceiling and asphalt shingle roof.

BASE BUILDINGS

Cost per sq. ft. of ground area

	2000	4000	6000	8000	10000	15000
BUILDING A	$2.10	2.00	1.90	1.90	1.80	1.75
BUILDING B	5.15	4.60	4.10.	3.90	3.85	3.75

ADJUSTMENTS TO BASE BUILDINGS

Building A or B, cost of each ventilating fan:

24"	$100
36"	150

Building A

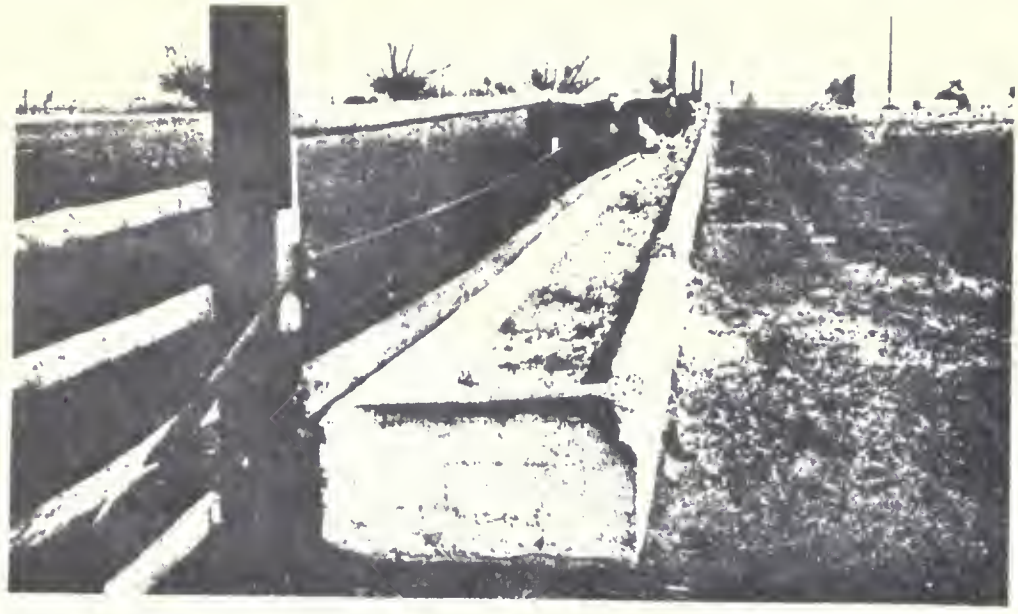
Per sq. ft. ground area

Concrete floors and ducts ---$1.15

Building B

Per sq. ft. ground area

Insulated frame wall-----	-$0.50
Metal roof ----------	+ .10
Roll roofing ----------	+ .05
Earth floor ----------	- .50



CONCRETE FENCE BUNK

CATTLE FEEDING BUNKS AND FENCING COSTS

Used in feed lots where feeding from either side is desirable.
Typical bunks are constructed of concrete, some have plank sides and post construction.

BASE COSTS	Per lineal foot
Concrete bunk	$10.00
Plank bunk	5.50

ADJUSTMENTS	Costs per square foot
Roof	$1.00
Concrete apron	.55

STOCK WATERERS	
Cattle	$125.00
Hog and sheep	75.00

Typical farmer-built feed bunks are constructed of rough lumber and posts, some are made of finished planking. Feeding from one side only.

BASE COSTS	Per lineal foot
Rough lumber fence bunk	$5.00
Concrete fence bunk	7.00

MECHANICAL FEEDERS	Cost per lineal foot
Automatic control	$25.00
Manual control	15.00

FARM BUILDING UNIT COST SCHEDULE
COST IN PLACE

FOUNDATION - FOOTINGS & WALLS

Per lineal foot

	Light	Average	Heavy
Mud sills	$0.30		
Poured concrete footing and foundation wall	1.35	$2.05	$4.25
Wood on concrete piers	.41	.66	1.55

FLOORS

	Per sq. ft.
Asphaltic concrete	$0.25
Concrete slab	0.50
Flooring, 1"	0.45
Flooring, 2"	0.65
Subfloor - shiplap	0.33

Joists

	Per sq. ft.
2" X 6", 24" O.C.	$0.24
2" X 8", 24" O.C.	0.31
2" X 10", 24" O.C.	0.31
2" X 12", 24" O.C.	0.38
2" X 12", 16" O.C.	0.56

CEILING

	Per sq. ft.
Composition	$0.13
Metal	0.34
Plaster cement	0.28
Plywood	$0.30
Sheetrock	0.25
Shiplap	0.25

ROOF FRAMING - SHEATHING AND COVER

	Per sq. ft.
Fiberglass	$0.50 to $0.85
Metal	0.38
Roll composition, 3 ply	0.20
Sheathing, 1" solid	0.30
Sheathing, 1" spaced	0.18

Rafters

	Per sq. ft.
2" X 4", 24" O.C.	$0.25
2" X 6", 24" O.C.	0.26
2" X 8", 24" O.C.	0.28
Shingles	0.35

EXTERIOR WALL

Per Sq. Ft. of Wall Area

2" X 4", 24" O.C.	$0.20
2" X 6", 24" O.C.	0.28
Board and batts	0.55
Cedar shingles	0.34
Concrete block	1.31
Aluminum	0.39
Galvanized iron	0.31
Laminated 2" X 4"	0.88
Paint	0.10
Bevel siding	0.61
Novelty siding	0.56
Posts and girts	$0.15
Shakes	0.61
Sheathing, 1"	0.34
Stucco on masonry	0.33
Doors, wood, hinged Per sq. ft.	$2.20 to 2.80
Doors, wood, sliding, Per sq. ft.	1.25 to 2.20
Windows, wood each	7.50 to 18.75

FARM BUILDING UNIT COST SCHEDULE
COST IN PLACE
-Continued-

INTERIOR

Per lineal foot - 8' high

Concrete block wall, 8"	$12.50
Wood frame various wood finishes,	
One side	6.00
two sides	9.00

PLUMBING

Drinking cups	$18.75 to $37.50
Floor drain	25.00
Hose bibs	18.75
Lavatory	145.00
Metal sink	87.00
Pipe line washer (dairy)	375.00
Water heater	145.00

ELECTRICAL WIRING

Cost per outlet

Conduit	$ 12.50
Romex or knob & tube	6.25
Service,	
Light	50.00
Medium	150.00
Heavy	250.00

Cost per fixture

Reflector type	$5.00
Vapor & dust proof	10.00

DEPRECIATION OF FARM OUTBUILDINGS

BASIC DEPRECIATION TABLE (GUIDE ONLY)

Actual Age	Excellent 1	Good 2	Average 3	Poor 4
0 - 3 Yrs.	3%	5%	7%	10%
4 - 8	3 - 8	5 - 10	10 - 15	15 - 25
9 -12	9	10 - 15	15 - 20	25 - 30
14 - 18	10	15 - 20	20 - 25	30 - 35
19 - 23	15	20 - 25	30 - 35	40 - 50
24 - 38	20	25 - 30	35 - 40	50 - 55
39 - 42	25	35	40 - 50	55 - 60
43 - 50	30 - 35	40 - 50	55 - 60	65 - 70
50 - 60 & over	40	50	65	70 - 75

EXCELLENT - Building is in perfect condition.

GOOD - Minor physical depreciation is evident.

AVERAGE - Average deterioration.

POOR - Pronounced physical deterioration.

EXAMPLE

Subject: Average quality barn; 4000 sq. ft.; full loft; 28 yrs. old. Depreciation 35%.

Base cost	$2.95 sq. ft.
Add for loft	1.25
Total cost per sq. ft.	$4.20
Replacement cost - 4000 sq. ft. x $4.20	= $16,800
Less 35% estimated physical depreciation	5,880
	$10,920
Less 25% functional depreciation	2,730*
Estimated present value	$ 8,190

*The functional depreciation was allowed because there was limited use for the loft.

(Sample Farm)

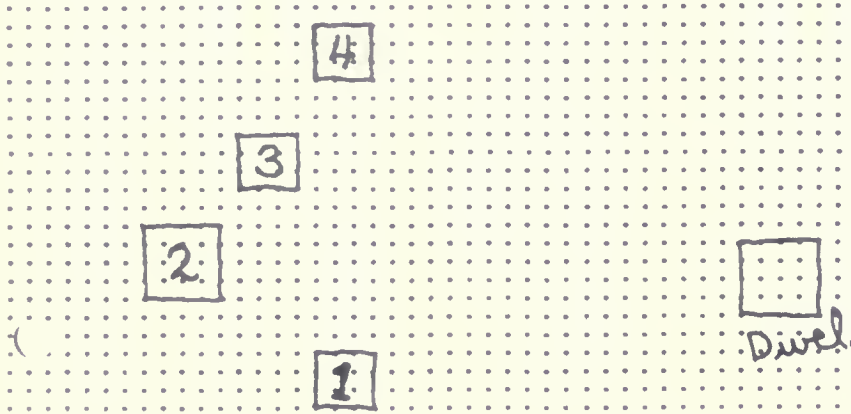
OUTBUILDINGS

	1	2	3	4	5	6	7	8	9	10	11	12
EARTH FLOOR	✓	✓		✓								
CEMENT FLOOR			✓									
SIDING	W	M	B	B								
WALL FOUND												
~~STONE~~ FOUND	C	C	C	C								
Roofing	W	M	M	W								
Loft	W											
ELECTRIC LIGHTS	✓	✓	✓	O								
O.H. DOORS												
GRADE	A	G	G	L								

	OCCUPANCY	AGE	CONDITION	SIZE	SQ. FT. AREA	BASE RATE	REPL. VALUE	PHYSICAL DEPR.	PHYSICAL VALUE	FUNC. DEPR.	NORMAL VALUE	LOCAL INDEX	SOUND VALUE
1	Barn	1947	A	40x100	4,000	4.20	16,800	35	10,920	25	8,190		8,190
2	Quon (Behlen)	1970	G	52x190	9,880	1.60	15,810	5	15,020	0	15,020		15,020
3	~~Imp.~~ Shed	1965	G	30x40	1,200	3.75	4,500	8	4,140	0	4,140		4,140
4	Shed	1945	P	23x30	690	2.55	1,760	53	827	55	370		370
5													
6													
7													
8													
9													
10													
11													
12													
											TOTAL		27,720

APPRAISED BY JGL DATE 6-20-72 PRICED BY JGL DATE 6-20-72 POSTED BY DATE

No. 1 – Limited use of loft.
No. 4 – Very limited use of shed.



ABBREVIATIONS

P - Poor
A - Average
G - Good
E - Excellent

B - Block
BB - Board & Batten
BR - Brick
C - Concrete
CS - Comp. Shingles
F - Frame
L - Log
M - Metal
MS - Mud Sill
N - None
P - Pole
RR - Rolled Roof
S - Stone
T - Tile
W - Wood

ROUND CORRUGATED STEEL BINS

FULL VALUES

BU. CAP.	BIN	FOUNDATION	ERECTED ON FOUNDATION
1000 Bu.	$ 475	$ 50	$ 525
1330 Bu.	575	55	630
1650 Bu.	745	80	825
2200 Bu.	820	95	915
2700 Bu.	1040	110	1150
3300 Bu.	1210	135	1345
4400 Bu.	1425	155	1580
5200 Bu.	1540	175	1715
5900 Bu.	1685	225	1910
6600 Bu.	1800	250	2050
7200 Bu.	1925	300	2225
8200 Bu.	2125	340	2465
9500 Bu.	2750	400	3150
12000 Bu.	3625	435	4060
18000 Bu.	4185	475	4660
22000 Bu.	4685	525	5210

The above schedule is based on the average cost of steel grain bins in Montana. Bins of poor quality can be price from 5% to 15% less. Bins of good quality can be priced from 5% to 15% more than schedule.

BOILER PLATE BINS

CAPACITY	PER BU.	TOTAL IN PLACE
10,000 Bu.	$ .65 Bu.	$ 6,500
15,000 Bu.	.60 Bu.	9,000
20,000 Bu.	.55 Bu.	11,000
25,000 Bu.	.52 Bu.	13,000
30,000 Bu.	.50 Bu.	15,000
40,000 Bu.	.45 Bu.	18,000
50,000 Bu.	.40 Bu.	20,000

CRIBBED BINS AND ANNEXES

Average cost of cribbed type elevators found on farms is approximately 95¢ per bushel if the capacity is under 10,000 bu. Annexed storage in addition, constructed of 2" x 6" lumber, averages around 50¢ to 60¢ per bushel.

MEASURES

SQUARE

144 sq. in. = 1 sq. ft.

9 sq. ft. = 1 sq. yard

4840 sq. yds. = 1 acre

43,560 sq. ft. = 1 acre

640 acres = 1 sq. mi. or 1 section

36 sq. mi. = 1 township

CUBIC

1728 cu. in. = 1 cu. ft.

27 cu. ft. = 1 cu. yard

128 cu. ft. = 1 cord

231 cu. in = 1 gallon

1 cu. ft. = .8036 bu.

LINEAR

5 1/2 yds. = 1 rod

16 1/2 ft. = 1 rod

320 rods = 1 mile

5280 ft. = 1 mile

To compute the circumference of a circle - Multiply the diameter by 3.1416.

To compute the area of a circle - Multiply the square of the diameter by 0.7854, or multiply the square of the radius by 3.1416.

To compute the cubical contents of a circular column or cylinder - Multiply the area of the circle by the height.

Alfalfa Seed	1 Bushel	60 Pounds
Barley	1 "	48 "
Beans	1 "	60 "
Flax Seed	1 "	56 "
Oats	1 "	32 "
Potatoes	1 "	60 "
Rye	1 "	56 "
Wheat	1 "	60 "

DATE DUE

MSU NOV 1 3 '74